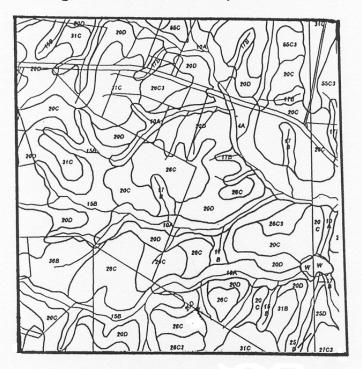
# INTERPRETIVE GUIDE TO THE SOILS OF FAUQUIER COUNTY, VIRGINIA



County soil survey information to be used with updated soil maps

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#### USE OF INFORMATION IN THIS GUIDE

#### HOW TO USE THIS INFORMATION

This material is **intended for planning purposes, as well as to alert the reader to the broad range of conditions, problems, and use potential for each mapping unit.** A mapping unit (for example, "73B") is the countywide sum of all mapping delineations (all the "73B" areas in the County). For most mapping units in Fauquier County, the individual series in a mapping unit name (for example, "Penn" soils in the 73B mapping units or "Purcellville" soils in the 23B mapping unit) map account for only 50% of the soils actually to be found in the mapping unit. The mapping unit potential use rating refers to the overall combination of soil properties and landscape conditions. Therefore, a mapping unit rated as having good potential for urban uses probably contains some areas that have much poorer potential. Conversely, a mapping unit rated as having poor potential for a designated use may contain areas with good potential for that use. In on-site investigations, work is completed with much greater detail and inclusions of good or problem soils are specifically identified.

The information in this guide will enable the user to determine the distribution and extent of various types of soil and the kinds of problems which may be anticipated.

#### HOW NOT TO USE THIS INFORMATION

The information in this guide is **not** intended for use in determining **specific** use or suitability of soils for a particular site. It is of utmost importance that the reader understands that the information is geared to **mapping unit potential** and not to **specific site suitability**. An intensive on-site evaluation should be made to verify the soils map and determine the soil/site suitability for the specific use of the parcel.

#### **INTRODUCTION**

#### Soil Survey Information

The County Soil Scientist Office recently completed updating the 1956 Published Soil Survey to a rectified topographic base of 1 inch = 400 feet. This grid system and scale matches the Fauquier County Tax maps.

The original Soil Survey for Fauquier County was conducted in 1942-1944 by seven soil scientists working for the United States Department of Agriculture and the Virginia Agricultural Experiment Station. These maps were made by walking over the landscapes, boring auger holes where different soils were anticipated and drawing the soil lines on 1937 aerial photos which were at a scale of 1 inch = 1,320 feet. An experienced soil scientist could map 200 to 300 acres per day. These soil maps were published in 1956 at 1 inch = 1,760 feet. The maps were produced primarily for agricultural use and great emphasis was placed on surface features that affected tillage.

By the late 1980's, all available copies of the 1956 publication had been distributed. At the same time, the County was developing its Geographic Information System (GIS) and a need for updated soil information was prevalent. The first soils layer for the GIS was completed by using the 1956 published soil map (1 inch = 1,760 feet) and refitting the soil maps to the current Tax Map (1 inch = 400 feet). Since these soil maps had not been adjusted to fit the topography of the land (rectified), they had to be stretched to fit the County Tax Map base as best as possible. This first GIS soil layer consisted of soil line boundaries and labels. Many features that were on the original soil maps were not transferred to the GIS, (e.g. rock outcrop, springs, drainageway, cemeteries, schools, churches, etc.)

In a move to further update the GIS soil layer, the County Soil Scientist Office was established in 1989. Evaluations determined that the semi-corrected soil lines on the first layer would need to be adjusted to a rectified topographic base. (This made the adjusted soil lines more accurate in that the ridgetop soils were positioned on the ridges and drainageway soils fit the proper landscape position.)

Now that the updated soil survey maps are complete, they are indeed the best available soils information for individual parcels. Copies of the updated soils maps, which overlay the County Tax Map, are located in the front office of Community Development. Instructions are posted on the wall as how to use the map to locate your particular parcel. Along with the County Soil Interpretive Guide, a landowner or potential buyer can obtain information on what soil types exist on parcels and discover any limitations there may be for a proposed use.

The updated soil survey report is designed for many different users. Farmers, foresters, and agronomists can use it to evaluate the potential of the soil and the management needed for maximum food and fiber production. Planners, community officials, engineers, developers, builders, and homeowners can use the survey to plan land use, select sites for construction, and identify special practices needed to insure proper waste disposal, and pollution control can use the survey to help them understand, protect, and enhance the environment.

This interpretive guide used with the County Soil Survey Maps is the best available information to date. Use of the 1956 Soil survey publication is not recommended and will not be accepted as soils data for proposed project being submitted to the Department of Community Development.

This soil survey information is for planning purposes only. It is intended to alert the reader to the broad range of conditions, problems, and the soil potential for each mapping unit. Before any land use decisions occur, urban or agricultural, it is highly recommended that the updated soil map be consulted. Realizing the limitations of this soil map, the County Soil Scientist Office is providing a service, for a reasonable fee, that will offer much more detailed soils and cultural information to the land use decision maker. This service entails using the

updated soil map as a base in conjunction with the latest aerial and topographic data to field map the different soil types and cultural features at 1 inch = 400 feet.

The Type I Soil Mapping service will provide the greatest benefit if obtained before any type of urban or agricultural practices are planned. This would include subdivision of land (including administrative lots), industrial or commercial uses, and farm plans for special agricultural uses.

It is <u>NOT</u> intended for use in determining specific use or suitability of soils for a particular site. Soil Surveys do not take the place of an on-site engineering study, a lot-by-lot evaluation for septic tank drainfield areas or other on-site special use needs. It is, however, to be considered an over all land-use planning tool. The County Soil Survey will continually be updated as Type I Soil Mapping is completed for specific parcels.

#### Geologic Setting

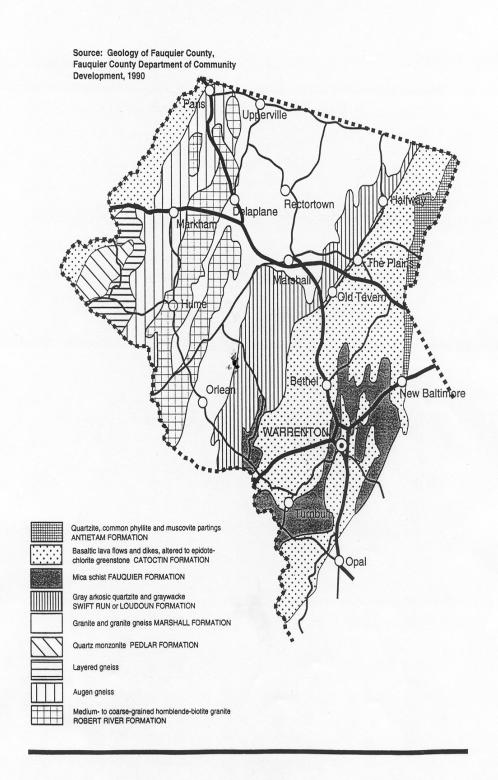
Fauquier County covers a geologically diverse area that manifests itself in a variety of unique and scenic landforms. An understanding of the geology of the County is vital to its continued economic prosperity and well managed development. For example, study of the underlying geology is necessary to determine site suitability for septic systems as well as the need for slope stabilization.

Soils, in particular, derive their characteristics from local geological and climatological conditions. Depending on its particular characteristics and mineral composition, soil type will determine what crops will grow best as well as site suitability for various densities of land development. The type, permeability and porosity of the underlying rock also govern the availability and quality of groundwater.

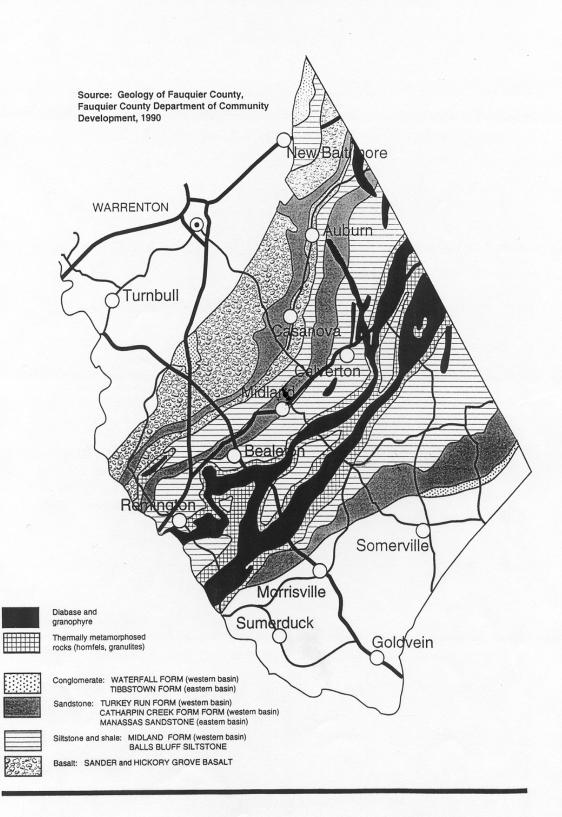
The geology of the County has evolved over a long period of time primarily through the geologic processes of plate tectonics and erosion. In brief, the North American Plate, of which Fauquier County belongs, had for hundreds of years collided with, separated from, and slid past other tectonic plates. Each time two or more plates collide, volcanic activity results and large rock formation are thrust and folded over one another. The resulting mountain forming process is referred to as an orogeny. After a time, collided plates or previously contiguous plates may rip apart and an ocean forms between them. More volcanic activity then takes place, filling shallow seas and covering the land with volcanic ash and debris and intruding surrounding rock with magma. During separation, jumbled slivers of the colliding continents are left as a testament to the collision. As volcanic activity subsides, the erosive processes of water and wind take hold and grind the landscape, forming river valleys, creating alluvial fans, and filling in low lying areas. Table 2.1 presents a geologic timeline for the formation of present day Fauquier County along with the associated events that helped shape it.

The County is divided into three geological provinces: the Blue Ridge Anticlinorium, the Culpeper basin, and the Northern Piedmont Province. The Blue Ridge runs from the Blue Ridge Mountains to Pond Mountain and Baldwin Ridge. To the east of the Blue Ridge lies the Culpeper Basin. East of the Culpeper Basin lies the deeply weathered, rolling lands of the Piedmont Province. Each geologic formation has a unique geological history and has a distinctive landscape signature. Each area also consists of a different assortment of rocks and minerals, which are valuable resources to the County. Maps 2.2A, 2.2B, and 2.2C present a geological picture of the County which is divided between the geological provinces and their constituent formations.

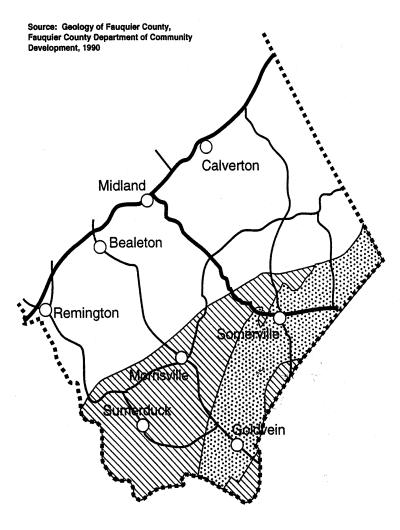
# General Geology Map: Blue Ridge Anticlinorium



## General Geology Map: Culpeper Basin



## General Geology Map: Piedmont Province





Metamorphosed sedimentary and volcanic rocks (phyllite, schist, metagraywacke) MINE RUN COMPLEX



Coarse- to medium-grained metamorphosed granite partly quartz monsonite GOLDVEIN PLUTON

#### **MAPPING UNIT POTENTIAL**

Soil properties and landscape features unique to a particular mapping unit can be used to describe that mapping unit's potential for certain generalized used. The mapping unit potential ratings are used to indicate general information on soil and site properties for a single mapping unit.

The County Soil Scientists have developed mapping unit potential ratings and class criteria for the following generalized uses:

- General development using central water and sewer
- General development using septic tank drainfields
- Agriculture
- Forestry

These four mapping unit potential ratings allow for the comparison of the relative compatibility among a group of soil and site properties and a group of similar uses.

This guide contains use potentials for the four group names above, including definition of potential classes and problems associated with each class. Additionally, the criteria for hydrologic soil groups are defined for use in stormwater runoff calculations and for hydric soils for use in wetland determinations are included.

This information is provided for use in conceptual planning and review, and as an organizational guide for site-specific investigations. The chief objective of mapping unit potential ratings for soils is to maximize the effective use of soil maps to spotlight potential soil problems for a variety of uses which may be proposed.

This guide is interim and tentative in nature. As Type I Soil Maps are completed on specific parcels, the more detailed mapping will update that portion of the County Soil Survey Map. Due to more detailed information new mapping units will be developed and added to the mapping legend when necessary. Additional soil information may be obtained from the County Soil Scientist.

# MAPPING UNIT POTENTIAL FOR GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER

In this generalized land use, soil-mapping units were rated based on their effect on major engineering operations during land development projects. These include, but are not limited to, roads, foundations, basements, building slabs, shallow excavation, use of soil as controlled fill material, and erosion/sediment control.

#### GOOD POTENTIAL

These mapping units have soil and site properties generally considered good for general development on central water and sewer.

#### FAIR POTENTIAL

These mapping units have soil-related problems that can generally be corrected at low cost and effort.

Major problems in utilization of these mapping units are 1) the erodibility of the soil, and 2) the large quantity of earthwork required to land-level the high amount of relief. When they occur along major drainageways, filling and land disturbance provides the potential for serious erosion and sedimentation problems.

#### POOR POTENTIAL

These mapping units have major soil-related problems, many difficult to correct, requiring engineering solutions which may not always be satisfactory.

Serious erosion and sedimentation are major problems. Often these mapping units occur too close to flowing streams to allow for adequate erosion and sedimentation control if the slopes are denuded. Much of the bedrock underlying these mapping units is fairly massive and may require substantial blasting during excavation. Many mapping units have essentially no soil material available for grading and/or landscaping and adequate vegetation restabilization is difficult. For most units, adequate bearing capacity can be obtained for individual houses in underlying rock material. If fill pads are used, adequate measures should be taken to remove boulders and large stones and to properly key the fill material into the residual material to prevent potential slippage problems. Soil material with low rock fragment content should be stockpiled for final grading.

Some mapping units have soils with low strength (high silt content), prolonged seasonal perched water tables, and high frost heave potential. Adequate bearing capacity can be obtained on underlying rock materials, usually at depths ranging from 30-50" below the surface. Drainage should be provided under slabs and around foundation. In some cases, underdrainage is desirable for road. Frost heave problems can be avoided by using conventionally required footing depths.

#### VERY POOR POTENTIAL

These mapping units have serious soil-related problems, some not correctable, and others requiring extensive and costly engineering solutions which may be unsatisfactory.

Mapping units with high shrink-swell clayey subsoils are very difficult to grade, do not respond to tile drainage, cause foundation placed in subsoils to crack, and cause roads/pavements to break up and fail prematurely. In addition to the plasticity problems, there are also perched water tables above the clay pan. Plastic soil materials should be undercut and disposed of from

any potential roadway, be used as backfill (material against basement or foundation walls) or as fill under slabs. Surface drainage and underdrainage should be provided for structures and roads.

Mapping units with intermittent high water tables, which occur along small drainageways and concave uplands, are difficult to drain due to clayey subsoils and low relief. Basements constructed in these soils are generally wet and/or periodically flooded. These soils are very unstable when wet and have very low bearing capacities.

Mapping units which have stones and rock outcrop that occupy more than 35% of the soil surface may require considerable blasting for roads and foundations. Stones and boulders make compaction and fine grading difficult unless removed from fill materials under roads and houses. Removal of float rock more than 10" in diameter from soil material is difficult and costly, particularly in more plastic soils found in eastern Fauquier. Soil materials containing large stone should not be used as backfill over pipes or against foundation walls.

Mapping units on steep slopes are generally very shallow to rock. Any grading disturbance necessitates the placement of potentially unstable fills for building purposes and brings about serious erosion and sedimentation problems.

Where development is proposed on any mapping unit rated VERY POOR, a geotechnical study should be prepared to assess the soil conditions and make recommendations for design.

#### MAPPING UNIT POTENTIAL FOR INDIVIDUAL SEPTIC TANK DRAINFIELD SEWAGE DISPOSAL SYSTEMS

In this generalized land use, soil mapping units were rated based on the evaluation criteria for septic drainfield found in the <u>Sewage Handling and Disposal Regulations</u> of the Virginia Department of Health. Judgements on specific sites for septic drainfields are deferred to the Fauquier County Health Department, who has sole responsibility for issuance or denial or permits.

#### **GOOD POTENTIAL**

These mapping units have a combination of soil and landscape properties that are most suitable for drainfield sites.

#### MARGINAL POTENTIAL

These mapping units have some favorable and some unfavorable soil and landscape properties. Conditions affecting use as drainfield sites are highly variable and predictability is low. Often these mapping units have soils which require additional soil studies, such as percolation tests, for consideration before permit action.

#### POOR POTENTIAL

These mapping units have questionable and unfavorable soil properties and/or landscape position. Predictability within mapping units is fairly accurate, although a site may be found on mapping unit inclusions (soils outside the norm describe for the unit). The majorities of these mapping units are moderately deep soils over shale or crystalline rock, or are moderately well to somewhat poorly drained soils on nearly level uplands.

#### NOT SUITED

These mapping units have soil and/or landscape features that are generally considered unsuited for satisfactory drainfield use. These mapping units have highly accurate predictability. These mapping units include somewhat poorly to poorly drained colluviual soils (in swales and depressions), floodplains, soils with plastic shrink-swell (expanding clay) subsoils, and soils on greater than 25% slopes or very shallow to rock.

#### PROPORTIONATE EXTENT OF FAUQUIER COUNTY RATED FOR SEPTIC <u>DRAINFIELDS</u>

Good Potential	5.3%
Marginal Potential	23.0%
Poor Potential	45.8%
Not Suited	25.9%

#### MAPPING UNIT POTENTIAL FOR AGRICULTURE

In this generalized land use, soil mapping units were rated for agriculture. The classes, defined below, indicate the most conservative use, although certainly not the sole use. Local conditions may strongly impact the use potential of an individual mapping unit.

#### PRIME CROPLAND

These mapping units have a combination of soil and landscape properties that make them highly suited for use as cropland. They have characteristics that require only basic conservation practices and short rotations. The soils in these mapping units generally have high inherent fertility, good water holding capacity, deep effective rooting zones, and are not subject to periodic flooding. This class also has good potential for use in grassland agriculture, forestry, and wildlife habitat.

#### SECONDARY CROPLAND

Mapping units in this class have soil properties or a combination of soil and site properties that limit their yield potential to marginal levels when used as cropland. Soils in these map units are best used in rotations including grassland agriculture. Some map units may require intensive conservation practices (such as tile drainage, diversions, surface water management, or strip cropping). Major features and properties include seasonal perched water tables, restrictive layers limiting rooting zones, stones which limit water holding capacity, tillage, seedbed preparation, and harvesting. This class also has good potential for use in grassland agriculture, forestry, or as wildlife habitat.

#### PRIME PASTURE

These mapping units are best suited for use as hay and pasture in grassland agriculture. Included in this class are map units with shallow soil, marginally steep slopes, and soils with drainage conditions not conducive to cropping. This class also has good potential for use in forestry or as wildlife habitat.

#### SECONDARY PASTURE

Mapping units in this class have soil properties or a combination of soil and site properties that limit their use as hay fields. Soils in this map unit are best used as permanent pasture. Major features and properties include steep slopes, large amount of stones and boulders, and seasonal high water tables, all of which affect use of mowing equipment. This class also has good potential for use in forestry or as wildlife habitat.

#### **NOT SUITED**

This class includes map units on very steep slopes, very shallow soils, substantial rock outcrop, or prolonged high water tables. The lands in these map units are best left undisturbed in their natural wooded environment for use in timber production and wildlife habitat due to difficulty of maintenance of grasslands. Many of these map units, particularly those on very steep slopes, are considered to be critical environmental areas as stream buffers. Other areas include very steep mountainside slopes and very wet landscapes. Although some map units within this class have been cleared, their best use is in woodland and as wildlife habitat.

### PROPORTIONATE EXTENT OF FAUQUIER COUNTY RATED FOR AGRICULTURE

Prime Cropland	10.8%
Secondary Cropland	34.2%
Prime Pasture	13.1%
Secondary Pasture	27.2%
Not Suited	14.7%

#### MAPPING UNIT POTENTIAL FOR FORESTRY

The management of trees begins with an understanding of the soil on which they grow or are to be grown. Some soils are very productive in growing wood crops; others may barely support tree cover. Different tree species may vary in production on the same soil. The probability of seeding survival, the relative dander of erosion when cover is removed, the resistance of trees to windthrow, and problems with equipment use during harvesting are some of the management items that can be inferred from soils information. Soil maps may be extremely useful in preparing pre-harvest plans, in applying erosion control methods, measures or practices while harvesting and regenerating forests in Fauquier County.

In this generalized land use, soil mapping units were rated for their potential productivity under hardwood and pine forest types. Ratings were based on representative site indices.

For further information about species suitability and woodland management practices, contact the County Forester, Virginia Department of Forestry.

#### PROPORTIONATE EXTENT OF FAUOUIER COUNTY RATED FOR FORESTRY

	Hardwood	Pine
Low Productivity	22.6%	0
Moderately Low Productivity	28.4%	0
Moderate Productivity	19.5%	27.4%
Moderately High Productivity	10.6%	6.4%
High Productivity	10.0%	52.7%
Very High Productivity	8.9%	13.5%

#### LAND USE CAPABILITY CLASSES

Land capability classification shows the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive land forming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for woodland or for engineering purposes.

Capability classes are designated by Roman numerals I through VIII. The numerals indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

- Class I soils have slight limitations that restrict their use.
- Class II soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices
- Class **III** soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both
- Class IV soils have very severe limitations that reduce the choice of plants or that require special conservation practices, or both
- Class V soils have are not likely to erode but have other limitations, impractical to remove, that limit their use
- Class VI soils have severe limitations that make them generally unsuitable for cultivation
- Class **VII** soils have very severe limitations that make them unsuitable for cultivation
- Class **VIII** soils and miscellaneous areas have limitations that nearly preclude their use for commercial crop production

The capability subclasses are designated with a small letter, e, w, s, or c, which follows the roman numeral (i.e. IIe). The classes are defined as follows:

- e shows the main hazard is the risk of erosion unless close growing plant cover is maintained.
- w shows water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage)
- s shows the soil is limited mainly because it is shallow, droughty, or stony
  - c shows the chief limitation is very cold or very dry climate, used in only some parts of the United States

#### EROSION AND SEDIMENT CONTROL

Many of the soils of Fauquier County are highly erodible, particularly in the surface and lower layers. Soils occurring on moderate to steep slopes are especially subject to erosion. It is very important that the presence of highly erodible soils be confirmed early, prior to any land disturbing activities. A thorough knowledge of the soils involved is essential to successful planning for erosion and sediment control. Highly erodible soils may not be considered in developing effective erosion and sedimentation control plans.

Soils containing high percentages of silts, fine sands, and mica have the highest erosion hazard. As the clay and organic matter content increases, the erosion hazard decreases because clays act as a binder to soil particles. Once clays are eroded, they are easily transported by runoff.

Erosion hazard ratings were developed for each soil-mapping unit, based on an adaptation of the Universal Soil Loss Equation under construction site conditions. The primary topographic considerations are slope steepness and slope length. Because of the effect of accumulated runoff, erosion potential is greater on long, steep slopes. The ratings are defined as:

0-7% Slight erosion hazard
7-15% Moderate erosion hazard
15-25% High erosion hazard
>25% Very high erosion hazard

Within these slope gradient ranges, the erosion hazard will become critical if the slope exceeds the following criteria:

0-7% 300 feet 7-15% 150 feet >15% 75 feet

Hydrologic soil group classes are used in determining soil-land use conditions for estimating runoff in the <u>Virginia Erosion and Sediment Control Handbook</u>. The hydrologic class (A, B, C or D, listed below) is an indicator of the minimum rate of infiltration obtained for a bare soil after prolonged wetting. By using the hydrologic classification and the associated land use, runoff curve numbers can be selected. Runoff curve numbers are used for determining peak discharge and total volume of surface water runoff for given conditions.

- A Low Runoff Potential: Soils having a high infiltration rate, even when thoroughly wetted, and consisting chiefly of deep, well to excessively drained sands or gravels.
- **B Moderately Low Runoff Potential:** Soils having a moderate infiltration rate when thoroughly wetted, and consisting chiefly of moderately well to well drained soils with moderately fine to moderately coarse texture.
- C Moderately High Runoff Potential: Soils having a slow infiltration rate when thoroughly wetted, and consisting chiefly of soils with a layer that impedes downward movement of water, or soils with moderately fine to fine texture.
- **D High Runoff Potential:** Soils having a very slow infiltration rate when thoroughly wetted, and consisting of clay soils with a high swelling potential, soils with a permanent high water table, soils with a clay layer at or near the surface, and shallow soils over nearly impervious material.

#### **HYDRIC SOILS**

Wetlands are protected by various state laws and at the federal level by Section 404 of the Clean Water Act. Wetlands are defined as "those areas that are inundated or saturated by groundwater of a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (Federal Register, Vol. 42, p. 37128)". The U.S. Army Corps of Engineers (USACE) and Environmental Protection Agency (EPA) are responsible for making determinations of wetlands regulated under the Clean Water Act. A permit must be obtained from the USACE in many cases where construction is planned in wetlands.

Wetlands can occur in a wide range of conditions in Fauquier County; from bottomland forests that seem dry most of the year to permanent standing water. Hydric soils and wooded wetlands are mostly concentrated along or near streams. Scattered wet depressions in cleared fields, usually at low places or formed from spring seeps also are common. Swamps created by beaver dams are also included. Red maple, sycamore and other water-tolerant hardwoods dominate in bottomland forests. Scattered emergent (rushes, sedges, cattails) areas occur in cleared fields and forest openings.

There are three basic criteria that must be met for an area to be classified as a wetland: 1.) hydric soils, 2.) hydrophytic (water-tolerant) plant species, and 3.) wetland hydrology.

First, the area in question (size is NOT a consideration) <u>must</u> occur on a hydric soil or on that part of a non-hydric soil that is a hydric inclusion. A hydric soil is a soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic (oxygen deficient) conditions in the upper part (Soil Conservation Service, 1987). Such soils usually support hydrophytic plants. If it is not a hydric soil, it can not be classified as a wetland.

The hydric soils shown on the Type I Soil Maps give a good indication of the extent and probability of wetlands. However, their presence on the soil map does not automatically mean that the site is a jurisdictional (USACE, EPA) wetland. Field identification should be undertaken to confirm the presence of wetlands. Further information on wetland delineation may be obtained from the County Soil Scientist.

The current hydric soils in the county are listed below. Keep in mind this list does not include soils that may have hydric soil inclusions within the unit (listed in the guide as "may have HYDRIC soil inclusions").

- 4A Hatboro silt loam; frequently flooded
- **6A** Bowmansville silt loam; frequently flooded
- **69A** Elbert silt loam
- **79A** Albano silt loam
- 110A Mongle Variant silt loam
- 179A Albano Variant silt loam
- **269A** Meetze very gravelly silt loam

#### GLOSSARY OF TERMS USED IN THIS GUIDE

Alluvium Sand, silt, clay, etc., deposited on land by flowing water.

Clay Pan A dense, compacted layer in the subsoil having a much higher clay

content than the overlaying material, from which it is separated by a sharply-defined boundary; formed by downward movement of clay or by synthesis of clay in place during soil information. Clay pans are usually hard when dry, and very plastic and sticky when wet. Clays usually have high shrink-swell potential. Clay pans usually impede the downward

movement of water and air, and the growth of plant roots.

Coarse Fragments Rock or mineral particles greater than 2.0 mm in diameter, such as

stones, gravels, or cobbles:

Rounded or Angular Fragments

Gravel 2mm - 3" diameter
Cobbles 3 - 10" diameter
Stones 10" - 2' diameter
Boulders 1 - 10' diameter

Flat on One Side or One Dimension Much Less Than The Other

Channers 2mm - 6" long
Flagstone 6 - 15" long
Stones 15" = 2' long
Boulders more than 2' long

Colluvium A deposit of rock fragments and soil material accumulated at the base of

steep slopes as a result of gravitational action.

Depth (Soil) Refers to depth below surface to a restrictive layer. This may be

a fragipan, rock, or other material that roots cannot penetrate. Roots further than 4" apart, center to center, are not considered substantial

penetration.

Very shallow 0 - 10" depth Shallow 10 - 20" depth Moderately Deep 20 - 40" depth Deep 40 - 60" depth Very Deep more than 60" depth Drainage (Soil) An interpreted characteristic of a soil which is a function of slope runoff

and permeability. Soil drainage classes used:

Well Drained No indication of restricted drainage

to 60" or more.

Moderately Well to Well

Drained

Depth to restricted drainage or water table 40 - 60" below surface.

Moderately Well Drained Depth to restricted drainage or

water table 18-40" below surface.

Somewhat Poorly Drained Depth to restricted drainage or water

table 6-18" below surface.

Poorly Drained Depth to restricted drainage or water

table 0-6" below surface.

Erosion (Soil) The wearing away of the land surface by running water, wind, ice, or

other geologic agent; classes recognized are:

Normal Less than 25" of the surface soil has

been removed.

Eroded 25-75% of the surface soil has been

removed. May contain gullies.

Severely Eroded More than 75 percent of the soil surface

has been removed. Usually many

gullies occur.

Floodplain That area along streams or drainageways that floods during heavy

rainstorms.

Fragipan A natural subsurface horizon with high bulk density relative to the solum

above; seeming cemented when dry, but when moist showing a moderate

to weak brittleness.

Hydric Soil A soil that is saturated, flooded, or ponded long enough to be conducive

for the formation of wetlands.

K Factor An erodibility factor (K) used in the universal Soil Loss Equation to

determine soil loss from an area over a period of time due to splash, sheet, and rill erosion. K Factors in Fauquier County range from 0.10 (lowest erodibility) to 0.43 (highest erodibility). Cohesiveness of soil particles, varies with different layers of the same soil, causing varying layers of the same soil, causing varying degrees of erodibility for a given

site.

Map Delineation A single area on a soil map depicted by soil boundary line.

Map Unit The collective of all soil map delineations of the same type (i.e., 73B) for

a survey area (County). Map units may contain one or more soils which

may vary considerably in their characteristics and use potential.

Mottles Patches of soil color different from the matrix color; commonly used in

gray mottles, indicative of wetness.

Parent Material The material from which the soil has been formed or from which the soil

is capable of being formed.

Permeability (Soil) Permeability is the rate of flow of water through a unit cross-section of

saturated soil in a unit of time, under specific temperature and hydraulic

conditions. Classes of soil permeability:

Very Slow less than 0.06" per hour Slow 0.06-0.2" per hour Moderately Slow 0.2-0.6" per hour Moderately Rapid 2.0-6.0" per hour Rapid 6.0-20" per hour Very Rapid more than 20" per hour

Relief The difference in elevation between the high and low points in a land

surface.

Residuum Unconsolidated and partially weathered mineral materials accumulated

by disintegration of consolidated rock in place.

River to Stream

Terrace

A landscape position on which the soils formed in alluvial sediments and with subsequent down-cutting by the stream, the

landscape is presently well above floodplain level.

Site Index The height to which a tree will grow in a "normal" stand in usual

competition, but not overcrowded, at an age of 50 years. The higher the

soil index, the more productive the soil.

Slope The angle at which land surfaces deviate from the horizontal, normally

expressed in percentage. Slope classes are

0 - 2% Nearly level 2 - 7% Gently sloping 7 - 15% Sloping

15 - 25% Moderately steep

25% + Steep

Surface Topsoil.

Subsoil Subsurface layer in which maximum clay occurs.

Substratum The zone of weathered rock material or other weathered parent

material below the surface and subsoil, above hard rock.

Texture (Soil) The relative percentage of various soil separates (sand, silt, and

clay), modified by coarse fragments where present.

Triassic Term that designates a geologic age (approximately 200 million years

ago) and consisting mainly of sedimentary rocks of conglomerate, sandstone and silt stones that have been intruded by igneous rocks such as diabase and basalt. The Culpeper Basin (of Triassic age) is also

referred to as the Piedmont Lowland.

Water Table The level below which the soil pores and rock crevices are filled with

water. Permanent water tables are commonly used as a source of water

in wells. Perched water tables are seasonal and are caused by

impermeable layers over which water builds up during wet seasons.

#### SUMMARY TABLE OF SOIL CHARACTERISTICS AND USE POTENTIAL

The following table is a summary of soil characteristics as related to the potential suitability for various uses and the major problems associated with each kind of soil. This table arranges the soils numerically. **The number/letter combinations (i.e. 56D) on the soil map represent the soil mapping units.** Note that these data are brief and highlights only the main characteristics and problems.

This table is arranged in seven columns. The first column lists the map unit symbol, the soil name, and range in slope. The second column briefly characterizes the soil represented by the map symbol. The third column lists the erosion hazard for unprotected soil, the K factor for the surface and subsoil, and the soil hydrologic group. The next four columns rate the soil potentials into GOOD, FAIR, POOR and VERY POOR categories and tell the major problems for that particular use. These ratings do not take the place of an on-site engineering study but are beneficial in planning further studies. The last column rates the Land Use Capability of the soil.

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

			USE POTENTIAL AND PRO	OBLEMS FOR	S	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
	**	al: 1	VERVINOOR	NOT GLUTTED	and a vine i niv	MODERAGE	**
1A	Very deep, well drained, dark yellowish brown sandy floodplain soils; developed in alluvial	Slight	VERY POOR	NOT SUITED	SECONDARY PASTURE	MODERATE	IIw
Colvard fine sandy	materials derived from upland soil material	0.49, 0.20	within 100-year floodplain; subject	flooding potential	THISTORE		
loam; frequently	weathered from predominantly metamorphic	D	to very frequent flooding				
flooded	and crystalline rocks	В	Bearing Capacity: low Shrink-swell Potential: low				
0 - 2%							
2A	Very deep, moderately well drained, yellowish	Slight	VERY POOR	NOT SUITED	SECONDARY	MODERATELY	IIIw
Codorus loam;	brown loamy soils with intermittent high water tables on floodplains; developed in alluvium	0.49, 0.37	within 100-year floodplain; subject	flooding potential	CROPLAND	HIGH	
frequently flooded	washed from cyrstalline and metamorphic		to frequent flooding; intermittent				
0 - 3%	rocks; may have HYDRIC soil inclusions	С	high water table				
0 - 376			Bearing Capacity: very low Shrink-swell Potential: low				
3A	Very deep, well drained, yellowish brown silty	Slight	VERY POOR	NOT SUITED	SECONDARY	HIGH	IIw
Suches loam;	soils on floodplains; developed in alluvium washed from metamorphic and crystalline	0.49, 0.20	within 100-year floodplain; subject	flooding potential	CROPLAND		
frequently flooded	rocks	,,,,,,,	to frequent flooding	8 F · · · ·			
0 - 3%		В	Bearing Capacity: low				
0 - 3%			Shrink-swell Potential: low				
4A	Very deep, poorly drained, gray loamy soils	Slight	VERY POOR	NOT SUITED	NOT SUITED	HIGH	VIIw
Hatboro silt loam;	with intermittent high water tables on concave depressions in floodplains; developed in	0.49, 0.20	within 100-year floodplain; subject	flooding potential			
frequently flooded	alluvium washed from cyrstalline and	0.49, 0.20	to very frequent flooding;	nooding potential			
	metamorphic rocks; HYDRIC SOIL	D	intermittent high water table;				
0 - 3%			ponding of surface water for long periods				
			Bearing Capacity: very low				
			Shrink-swell Potential: low				
5A	Very deep, moderately well drained, mottled	Slight	VERY POOR	NOT SUITED	SECONDARY	HIGH	IIIw
	yellowish-brown and weak red silty soils with	_			CROPLAND		
Rowland silt loam;	high water tables on floodplains; developed in	0.43, 0.28	within 100-year floodplain; subject	flooding potential			
frequently flooded	alluvium from Triassic uplands; may have HYDRIC soil inclusions	С	to frequent flooding  Bearing Capacity: very low				
0 – 3%			Shrink-swell Potential: low				

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		EDOGION HAZADD	USE POTENTIAL AND PRO	OBLEMS FOR	S	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
6A	Very deep, somewhat poorly to poorly drained, gray and strong brown clayey soils in back	Slight	VERY POOR	NOT SUITED	NOT SUITED	MODERATELY HIGH	VIw
Bowmansville silt	channels and depressions in floodplains;	0.37, 0.32	within 100-year floodplain; subject	flooding potential			
loam; frequently flooded	developed from alluvium washed from Triassic uplands; HYDRIC soil	D	to very frequent flooding; high water table; ponding of surface water for long periods				
0 - 3%			Bearing Capacity: very low Shrink-swell Potential: moderate				
7A	Very deep, well drained, brown loamy soils on narrow floodplains; developed in alluvium	Slight	VERY POOR	POOR	PRIME CROPLAND	HIGH	I
Bermudian silt loam; occasionally flooded	washed from Triassic uplands	0.37, 0.37 B	within 100-year floodplain; subject to occasional flooding Bearing Capacity: low	flooding potential			
0 – 3%		D	Shrink-swell Potential: low				
8A	Very deep, somewhat poorly drained, yellowish brown loamy soils with intermittent	Slight	VERY POOR	NOT SUITED	SECONDARY PASTURE	MODERATELY HIGH	
Codorus Variant loam; frequently	high water tables on floodplains; developed in alluvium washed from crystalline and	0.49,0.37	Within 100-year floodplain; subject to frequent flooding; high water	flooding potential			
flooded 0 - 3%	metamorphic rocks; may have HYDRIC soil inclusions	С	table  Bearing Capacity: very low  Shrink-swell Potential: low				
9A	Very deep, somewhat poorly drained, yellowish brown loamy soils with high water	Slight	VERY POOR	NOT SUITED	NOT SUITED	MODERATE	VIs
Mongle loam, very stony	tables in concave landscapes, along small drainageways and on alluvial fans; contains	0.37, 0.37	may be within 100-year floodplain; high water table; overland flow-	high water table			
0 - 3%	0.1 – 3% surface stones; developed in recent colluvium/alluvium washed from basic and	С	significant destructive potential during flooding events; surface				
	acidic rocks; may have HYDRIC soil inclusions		stones  Bearing Capacity: low  Shrink-swell Potential: moderate				
9B**	Very deep, somewhat poorly drained, yellowish brown loamy soils with high water	Slight	VERY POOR	NOT SUITED	NOT SUITED	MODERATE	
Mongle loam, very stony	tables in concave landscapes, along small drainageways and on alluvial fans; contains	0.37, 0.37	may be within l00-year floodplain; high water table; overland flow-	high water table			
3 - 8%	0.1 – 3% surface stones; developed in recent colluvium/alluvium washed from basic and acidic rocks; may have HYDRIC soil inclusions	С	significant destructive potential during flooding events; surface stones Bearing Capacity: low Shrink-swell Potential: moderate				

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		EROSION HAZARD	USE POTENTIAL AND PRO	OBLEMS FOR	5	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILIT CLASS
10A	Very deep, somewhat poorly drained, yellowish brown loamy soils with high water	Slight	VERY POOR	NOT SUITED	SECONDARY PASTURE	MODERATELY HIGH	IVw
Mongle loam	tables in concave landscapes, along small drainageways and on alluvial fans; developed	0.43, 0.43	may be within 100-year floodplain; high water table; overland flow-	high water table			
0 - 3%	in recent colluvium/alluvium washed from basic and acidic rocks; may have HYDRIC soil inclusions	С	significant destructive potential during flooding events Bearing Capacity: low Shrink-swell Potential: moderate				
10B**	Very deep, somewhat poorly drained, yellowish brown loamy soils with high water	Moderate	VERY POOR	NOT SUITED	SECONDARY PASTURE	MODERATELY HIGH	
Mongle loam	tables in concave landscapes, along small drainageways and on alluvial fans; developed	0.43, 0.43	may be within 100-year floodplain; high water table; overland flow-	high water table			
3 - 8%	in recent colluvium/alluvium washed from basic and acidic rocks; may have HYDRIC soil inclusions	С	significant destructive potential during flooding events Bearing Capacity: low Shrink-swell Potential: moderate				
11A	Very deep, somewhat poorly drained, brownish-yellow loam soils with high water	Slight	VERY POOR	NOT SUITED	SECONDARY PASTURE	MODERATELY HIGH	IVw
Rohrersville loam; stony 0 - 3%	tables in drainageways; developed in recent greenstone colluvium/alluvium washed from steep rocky slopes; may have HYDRIC soil inclusions	0.37, 0.37 C	may be within 100-year floodplain; high water table; overland flow- significant destructive potential during flooding events	high water table			
			Bearing Capacity: low Shrink-swell Potential: moderate				
12A	Very deep, somewhat poorly drained, brownish-yellow loam soils with high water	Slight	VERY POOR	NOT SUITED	SECONDARY PASTURE	MODERATELY HIGH	IVw
Rohrersville loam	tables in drainageways; developed in recent greenstone colluvium/alluvium; may have	0.43, 0.43	high water table; ponding; may be within 100-year floodplain; low	high water table			
0 - 3%	HYDRIC soil inclusions	С	bearing capacity  Bearing Capacity: low  Shrink-swell Potential: moderate				
13A**	Very deep, moderately well to somewhat poorly drained, strong brown loamy soils in	Slight	POOR	NOT SUITED	PRIME PASTURE	MODERATELY LOW	
Sumerduck loam	drainageways; developed in alluvium and colluvium from adjacent uplands	0.43, 0.28	intermittent high water table; low bearing capacity	high water table landscape position			
0 - 3%		С	Bearing Capacity: moderate Shrink-swell Potential: low				

*Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)* 

			USE POTENTIAL AND PRO	OBLEMS FOR	:	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
13B	Very deep, moderately well to somewhat poorly drained, strong brown loamy soils in	Moderate	POOR	NOT SUITED	PRIME PASTURE	MODERATELY LOW	IVw
Sumerduck loam	drainageways; developed in alluvium and colluvium from adjacent uplands	0.43, 0.28	intermittent high water table; low bearing capacity	high water table landscape position			
3 - 8%	voia i am adjavon apamas	С	Bearing Capacity: moderate Shrink-swell Potential: low	iniuscape position			
14A**	Deep, well to moderately-well drained dark reddish-brown loamy soils with intermittent	Slight	POOR	NOT SUITED	PRIME CROPLAND	MODERATELY HIGH	
Manassas Variant loam	high water tables in concave upland landscapes (swales) and drainageways; developed in local colluvium and residuum of	0.37, 0.24 B	intermittent water table; low bearing capacity; receives runoff from higher areas	landscape position			
0 - 3%	materials derived from Triassic siltstone, shale and conglomerate	D	Bearing Capacity: moderate Shrink-swell Potential: low				
14B	Deep, well to moderately-well drained dark reddish-brown loamy soils with intermittent	Moderate	POOR	NOT SUITED	PRIME CROPLAND	MODERATELY HIGH	IIe
Manassas Variant loam	high water tables in concave upland landscapes (swales) and drainageways;	0.37, 0.24	intermittent high water table; low bearing capacity; receives runoff	landscape position			
3 - 8%	developed in local colluvium and residuum of materials derived from Triassic siltstone, shale and conglomerate	В	from higher areas  Bearing Capacity: moderate  Shrink-swell Potential: low				
14C**	Deep, well to moderately-well drained dark reddish-brown loamy soils with intermittent	Moderate	POOR	NOT SUITED	SECONDARY CROPLAND	MODERATELY HIGH	
Manassas Variant loam	high water tables in concave upland landscapes (swales) and drainageways;	0.37, 0.24	intermittent high water table; low bearing capacity; receives runoff	landscape position			
8 - 15%	developed in local colluvium and residuum of materials derived from Triassic siltstone, shale and conglomerate	В	from higher areas  Bearing Capacity: moderate  Shrink-swell Potential: low				
15A**	Very deep, moderately well drained, yellowish-brown loamy soils with intermittent	Slight	POOR	NOT SUITED	SECONDARY CROPLAND	MODERATE	
Seneca loam	high water tables in concave swales and along small drainageways; developed in recent	0.37, 0.28	intermittent high water table; low bearing capacity when wet; receives	high water table landscape position			
0 - 2%	colluvium and local wash from crystalline and metamorphic uplands; may have HYDRIC soil inclusions	В	runoff from higher areas  Bearing Capacity: moderate  Shrink-swell Potential: low				

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

	j son Characteristics and Ose I otential	1 0	USE POTENTIAL AND PRO	OBLEMS FOR	S	ELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
15B**	Very deep, moderately well drained, yellowish-brown loamy soils with intermittent	Moderate	POOR	NOT SUITED	SECONDARY CROPLAND	MODERATE	
Seneca loam	high water tables in concave swales and along	0.37, 0.28	intermittent high water table; low	high water table			
2 - 7%	small drainageways; developed in recent colluvium and local wash from crystalline uplands; may have HYDRIC soil inclusions	В	bearing capacity when wet; receives runoff from higher areas Bearing Capacity: moderate Shrink-swell Potential: low	landscape position			
15C**	Very deep, moderately well drained, yellowish-brown loamy soils with intermittent	Moderate	POOR	NOT SUITED	SECONDARY CROPLAND	MODERATE	
Seneca loam	high water tables in concave swales and along small drainageways; developed in recent	0.37, 0.28	intermittent high water table; low bearing capacity when wet; receives	high water table landscape position			
7 - 15%	colluvium and local wash from crystalline uplands; may have HYDRIC soil inclusions	В	runoff from higher areas  Bearing Capacity: moderate  Shrink-swell Potential: low	ianuscape position			
16A**	Very deep, well drained, yellowish-brown to reddish-brown silty soils with intermittent high	Moderate	POOR	NOT SUITED	PRIME CROPLAND	HIGH	
Meadowville silt loam 0 - 2%	water tables in concave uplands and along small drainageways; developed in recent colluvium and local wash from acid rock materials; may have HYDRIC soil inclusions	0.37, 0.32 B	low bearing capacity when wet; intermittent high water table; receives runoff from higher areas Bearing Capacity: moderate	landscape position			
			Shrink-swell Potential: low				
l6B**	Very deep, well drained, yellowish-brown to reddish-brown silty soils with intermittent high	Moderate	POOR	NOT SUITED	PRIME CROPLAND	HIGH	
Meadowville silt loam	water tables in concave uplands and along small drainageways; developed in recent colluvium and local wash from acid rock	0.37, 0.32 B	low bearing capacity when wet; intermittent high water table; receives runoff from higher areas	landscape position			
2 - 7%	materials; may have HYDRIC soil inclusions		Bearing Capacity: moderate Shrink-swell Potential: low				
16C**	Very deep, well drained, yellowish-brown to reddish-brown silty soils with intermittent high	Moderate	POOR	NOT SUITED	SECONDARY CROPLAND	HIGH	
Meadowville silt loam 7 - 15%	water tables in concave uplands and along small drainageways; developed in recent colluvium and local wash from acid rock materials; may have HYDRIC soil inclusions	0.37, 0.32 B	low bearing capacity when wet; intermittent high water table; receives runoff from higher areas Bearing Capacity: moderate	landscape position			
7 - 1370	materials, may have it i DATC son metusions		Shrink-swell Potential: low				

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

	<u> </u>	1 2	USE POTENTIAL AND PR	OBLEMS FOR	S	ELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
17A**	Very deep, well drained, brown loamy soils in concave swales and along small drainageways;	Slight	POOR	NOT SUITED	PRIME CROPLAND	HIGH	
Middleburg loam	developed in recent colluvium and local wash from crystalline uplands	0.37, 0.28	low bearing capacity when wet; intermittent high water table;	landscape position			
0 - 2%	nom er yournine upuntes	В	receives runoff from higher areas  Bearing Capacity: moderate  Shrink-swell Potential: low				
17B	Very deep, well drained, brown loamy soils in concave swales and along small drainageways;	Moderate	POOR	NOT SUITED	PRIME CROPLAND	HIGH	IIe
Middleburg loam	developed in recent colluvium from mixed basic and acidic rock	0.37, 0.28	low bearing capacity when wet; intermittent high water table;	landscape position			
2 - 7%		В	receives runoff from higher areas  Bearing Capacity: moderate  Shrink-swell Potential: low				
17C**	Very deep, well drained, brown loamy soils in concave swales and head of drainageways;	Moderate	POOR	NOT SUITED	SECONDARY CROPLAND	HIGH	
Middleburg loam	developed in recent colluvium and local wash from crystalline uplands	0.37, 0.28	low bearing capacity when wet; intermittent high water table;	landscape position			
7 - 15%	nom er yournine upuntes	В	receives runoff from higher areas Bearing Capacity: moderate Shrink-swell Potential: low				
18B**	Moderately deep, well drained, strong brown, coarse-loamy (Tankerville) and very deep,	Moderate	POOR	POOR	SECONDARY PASTURE	LOW	
Tankerville – Purcellville loam,	well drained, strong brown silty (Purcellville) soils on undulating summits and gently sloping	0.24, 0.20	shallow to rock; rock outcrop; stoniness	shallow to rock			
very rocky	backslopes; 2-10% rock outcrop and 0.1-3% stones and/or boulders cover the surface;	В	Bearing Capacity: moderate				
2 - 7%	developed in residuum from granite, granite gneiss and granitic schist		Shrink-swell Potential: low				
18C	Moderately deep, well drained, strong brown, coarse-loamy (Tankerville) and very deep,	Moderate	POOR	POOR	SECONDARY PASTURE	LOW	VIs
Tankerville – Purcellville loam,	well drained, strong brown silty (Purcellville) soils on strongly sloping backslopes and	0.24, 0.20	shallow to rock; rock outcrop; stoniness	shallow to rock			
very rocky	undulating summits; 2-10% rock outcrop and 0.1-3% stones and/or boulders cover the	В	Bearing Capacity: moderate				
7 - 15%	surface; developed in residuum from granite, granite gneiss and granitic schist		Shrink-swell Potential: low				

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	·	EROSION HAZARD	USE POTENTIAL AND PRO	OBLEMS FOR	SI	ELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
18D	Moderately deep, well drained, strong brown,	High	POOR	POOR	SECONDARY	LOW	VIs
	coarse-loamy soils on moderately steep	Č			PASTURE		
Tankerville loam,	backslopes; 2-10% rock outcrop and 3-15%	0.24, 0.20	shallow to rock; steep slopes;	shallow to rock			
very rocky	stones and/or boulders cover the surface;		stoniness	steep slopes			
	developed in residuum from granite, granite	В	Bearing Capacity: moderate				
15 - 25%	gneiss and granitic schist		Shrink-swell Potential: low				
18E	Moderately deep, well drained, strong brown,	Very high	VERY POOR	NOT SUITED	NOT SUITED	LOW	VIIe
	coarse-loamy soils on steep backslopes; 2-10%						
Tankerville loam,	rock outcrop and 1-20% stones and/or	0.24, 0.20	steep slopes; rock outcrops;	steep slopes			
very rocky	boulders cover the surface; developed in	_	stoniness	rock outcrops			
	residuum from granite, granite gneiss and	В	Bearing Capacity: moderate				
25 - 45%	granitic schist		Shrink-swell Potential: low				
18F**	Moderately deep, well drained, strong brown,	Very high	VERY POOR	NOT SUITED	NOT SUITED	LOW	
	coarse-loamy soils on very steep backslopes;	0.24.0.20					
Tankerville loam,	2-10% rock outcrop and 1-20% stones and/or	0.24, 0.20	steep slopes; rock outcrops	steep slopes			
very rocky	boulders cover the surface; developed in	D	Bearing Capacity: moderate	rock outcrops			
45 (50/	residuum from granite, granite gneiss and	В	Shrink-swell Potential: low				
45 - 65% 19B**	granitic schist  Moderately deep, well drained, strong brown,	Moderate	VERY POOR	NOT SUITED	NOT SUITED	LOW	
190	coarse-loamy soils on gently sloping summits	Moderate	VERT FOOR	NOT SUITED	NOT SUITED	LOW	
Tankerville-Rock	and backslopes; 10 to 25% rock outcrops;	0.20, 0.17	rock outcrops; stoniness				
outcrop complex	loose stones and/or boulders cover 0 to 45%	0.20, 0.17	Bearing Capacity: moderate	rock outcrops			
outer op complex	of the surface,; developed in residuum from	С	Shrink-swell Potential: low	rock outcrops			
2 - 7%	granite, granite gneiss and granitic schist	Č	Shi ma swen i dentan. 10w				
19C**	Moderately deep, well drained, strong brown,	Moderate	VERY POOR	NOT SUITED	NOT SUITED	LOW	
	coarse-loamy soils on strongly sloping						
Tankerville-Rock	summits and backslopes; 10 to 25% rock	0.20, 0.17	rock outcrops; stoniness				
outcrop complex	outcrops; loose stones and/or boulders cover 0		Bearing Capacity: moderate	rock outcrops			
	to 45% of the surface,; developed in residuum	C	Shrink-swell Potential: low				
7 - 15%	from granite, granite gneiss and granitic schist						
19D	Moderately deep, well drained, strong brown,	High	VERY POOR	NOT SUITED	NOT SUITED	LOW	VIIs
	coarse-loamy soils on moderately steep						
Tankerville-Rock	backslopes and 10 to 25% rock outcrops;	0.20, 0.17	steep slopes; rock outcrops;	steep slopes			
outcrop complex	loose stones and/or boulders cover 0 to 45%	~	stoniness	rock outcrops			
15 250/	of the surface,; developed in residuum from	C	Bearing Capacity: moderate				
15 - 25%	granite, granite gneiss and granitic schist	** 1:1	Shrink-swell Potential: low	NOT GUITEF	NOT OF WEED	* 0***	* ***
19E	Moderately deep, well drained, strong brown,	Very high	VERY POOR	NOT SUITED	NOT SUITED	LOW	VIIs
Tankerville-Rock	coarse-loamy soils on steep backslopes and 10	0.20, 0.17	-t	-41			
	to 25% rock outcrop; 0-60% stones and/or	0.20, 0.17	steep slopes, rock outcrops	steep slopes			
outcrop complex	boulders cover the surface; developed in	С	Bearing Capacity: moderate	rock outcrops			
25 - 45%	residuum from granite, granite gneiss and granitic schist	C	Shrink-swell Potential: low				
4J = 4J/0	grannic schist						

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		EDOGRAVII. ZADD	USE POTENTIAL AND PRO	OBLEMS FOR	Si	ELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
19F**	Moderately deep, well drained, strong brown,	Very high	VERY POOR	NOT SUITED	NOT SUITED	LOW	
171	coarse-loamy soils on very steep backslopes	very mgn	VERTIOOR	NOTSCITED	NOT BUILD	LO W	
Tankerville-Rock	and 10 to 25% rock outcrop; 0-60% stones	0.20, 0.17	steep slopes, rock outcrops	steep slopes			
outcrop complex	and/or boulders cover the surface; developed		Bearing Capacity: moderate	rock outcrops			
	in residuum from granite, granite gneiss and	С	Shrink-swell Potential: low				
45 - 65%	granitic schist	) ( 1 · ·	EAD	MARCRIAL	DDD (E	LOW	
20B**	Moderately deep, well drained, strong brown coarse-loamy soils (Tankerville) and very	Moderate	FAIR	MARGINAL	PRIME PASTURE	LOW	
Tankerville –	deep, well drained, strong brown fine-silty	0.28, 0.24	shallow to rock	shallow to rock	TASTORE		
Purcellville	soils (Purcellville) on summits and gently	0.20, 0.2	Bearing Capacity: moderate				
complex, rocky	sloping backslopes; 0.1 – 2% rock outcrop;	В	Shrink-swell Potential: low				
	developed in residuum from granite, schist and						
2 - 7% 20C	gneiss  Moderately deep, well drained, strong brown	N. 1. 4	FAID	MADODIAL	PRIME	LOW	TIT
20C	coarse-loamy soils (Tankerville) and very	Moderate	FAIR	MARGINAL	PASTURE	LOW	IIIe
Tankerville –	deep, well drained, strong brown fine-silty	0.28, 0.24	shallow to rock	shallow to rock	TASTORE		
Purcellville	soils (Purcellville) on summits and strongly	,	Bearing Capacity: moderate				
complex, rocky	sloping backslopes; $0.1 - 2\%$ rock outcrop; developed in residuum from granite, schist and	В	Shrink-swell Potential: low				
7 - 15%	gneiss						
20D	Moderately deep, well drained, strong brown coarse-loamy soils (Tankerville) and very	High	POOR	POOR	PRIME PASTURE	LOW	IVe
Tankerville –	deep, well drained, strong brown fine-silty	0.28, 0.24	steep slopes; shallow to rock	shallow to rock			
Purcellville	soils (Purcellville) on moderately steep	D	<b>D</b> 1 G 1	steep slopes			
complex, rocky	backslopes; $0.1 - 2\%$ rock outcrop; developed in residuum from granite, schist and gneiss	В	Bearing Capacity: moderate Shrink-swell Potential: low				
15 - 25%							
20E	Moderately deep, well drained, strong brown, coarse- loamy soils on steep backslopes; 0.1 –	Very high	VERY POOR	NOT SUITED	SECONDARY PASTURE	LOW	VIIe
Tankerville loam;	2% rock outcrop; developed in residuum from	0.28, 0.24	steep slopes; shallow to rock	steep slopes			
rocky	granite, granite gneiss and granitic schist	В	Bearing Capacity: moderate Shrink-swell Potential: low	shallow to rock			
25 - 45%							
21B**	Very deep, well drained, yellowish-brown	Moderate	GOOD	GOOD	PRIME	MODERATE	
215	loamy soils on summits and gently sloping	Moderate	0002	GOOD	CROPLAND	MODERATIE	
Edneytown loam	backslopes; developed in residuum from,	0.24, 0.17					
2 - 7%	augen gneiss, granite gneiss and granite	В	Bearing Capacity: moderate Shrink-swell Potential: low				

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		EDOCIONI II A ZA DD	USE POTENTIAL AND PR	OBLEMS FOR	<u> </u>	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
21C	Very deep, well drained, yellowish-brown loamy soils on summits and strongly sloping	Moderate	GOOD	GOOD	SECONDARY CROPLAND	LOW	IIIe
Edneytown loam 7 - 15%	backslopes; developed in residuum from, augen gneiss, granite gneiss and granite	0.24, 0.17 B	Bearing Capacity: moderate Shrink-swell Potential: low				
21D	Very deep, well drained, yellowish-brown loamy soils on moderately steep backslopes;	High	FAIR	MARGINAL	PRIME PASTURE	LOW	IVe
Edneytown loam	developed in residuum from, augen gneiss, granite gneiss and granite	0.24, 0.17	steep slopes  Bearing Capacity: moderate	steep slopes	11.01010		
15 - 25%		В	Shrink-swell Potential: low				
21E	SEE MAP UNIT 121E		FAM	D0.07	nne ee	MODER : =======	
22B	Very deep, well drained, strong brown silty soils (Purcellville) and very deep, moderately	Moderate	FAIR	POOR	PRIME CROPLAND	MODERATELY HIGH	IIe
Purcellville - Swampoodle	well drained, brownish yellow loamy soils (Swampoodle) with intermittent high water	0.28, 0.28	intermittent high water table; low bearing capacity	intermittent high water table percs slow			
complex	tables on broad summits and slight depressions; may have shrink-swell clay in	В	Bearing Capacity: low Shrink-swell Potential: high				
2 – 7%	subsoil; developed in local colluvium and residuum from granitic rocks						
23B	Very deep, well drained, strong brown fine- silty soils on summits and gently sloping	Moderate	GOOD	GOOD	PRIME CROPLAND	MODERATE	IIe
Purcellville loam	backslopes; developed in residuum from granite, schist and gneiss	0.32, 0.28	Bearing Capacity: moderate				
2 – 7%		В	Shrink-swell Potential: low				
23C	Very deep, well drained, strong brown fine- silty soils on strongly sloping backslopes;	Moderate	GOOD	GOOD	SECONDARY CROPLAND	MODERATE	IIIe
Purcellville loam	developed in residuum from granite, schist and gneiss	0.32, 0.28	Bearing Capacity: moderate				
7 – 15%		В	Shrink-swell Potential: low		****		
23D3	Very deep, well drained, strong brown fine- silty soils on moderately steep backslopes;	High	FAIR	MARGINAL	PRIME PASTURE	MODERATE	
Purcellville loam; gullied	developed in residuum from granite, schist and gneiss	0.32, 0.28	steep slopes  Bearing Capacity: moderate	Steep slopes			
15 – 25%		С	Shrink-swell Potential: low				
24B	Very deep, well drained, yellowish-brown loamy soils (Edgemont) and very deep, well	Moderate	GOOD	MARGINAL	PRIME CROPLAND	LOW	IIe
Edgemont-Culpeper complex	drained, red clayey soils (Culpeper) on summits and gently sloping backslopes;	0.28, 0.28	Bearing Capacity: moderate	percs slowly	22-2-2-2		
2 – 7%	developed in residuum from meta-arkosic sandstone and meta-graywacke	В	Shrink-swell Potential: low				

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

	,	ED CATOLINIA DE	USE POTENTIAL AND PRO	NTIAL AND PROBLEMS FOR		SELECTED USES		
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS	
24C	Very deep, well drained, yellowish-brown loamy soils on undulating summits and	Moderate	GOOD	MARGINAL	SECONDARY CROPLAND	LOW	IIIe	
Edgemont loam	strongly sloping backslopes; developed in	0.28, 0.28		percs slowly	CHOT ZI II (B			
7 – 15%	residuum from meta-arkosic sandstone and meta-graywacke	В	Bearing Capacity: moderate Shrink-swell Potential: low					
25B**	Moderately deep, excessively drained, yellowish-brown coarse-loamy soils (Hazel)	Moderate	FAIR	MARGINAL	SECONDARY CROPLAND	LOW		
Hazel – Edgemont complex	and very deep, well drained, yellowish-brown loamy soils (Edgemont) on summits and gently sloping backslopes; developed in residuum	0.24, 0.24 B	shallow to rock  Bearing Capacity: moderate  Shrink-swell Potential: low	shallow to rock				
2- 7%	from arkosic sandstone and meta-graywacke		Sm mk swen i stentian. Iow					
25C	Moderately deep, excessively drained, yellowish-brown coarse-loamy soils (Hazel)	Moderate	FAIR	MARGINAL	SECONDARY PASTURE	LOW	IIIe	
Hazel – Edgemont complex; rocky	and very deep, well drained, yellowish-brown loamy soils (Edgemont) on summits and strongly sloping backslopes; 0.1 to 2% rock	0.24, 0.24 B	shallow to rock  Bearing Capacity: moderate  Shrink-swell Potential: low	shallow to rock				
7- 15%	outcrop; developed in residuum from arkosic sandstone and meta-graywacke	D	Sin inc-swen i occidan. low					
25C3**	Moderately deep, excessively drained, yellowish-brown coarse-loamy soils (Hazel)	Moderate	POOR	POOR	SECONDARY PASTURE	LOW		
Hazel – Edgemont complex; gullied	and very deep, well drained, yellowish-brown loamy soils (Edgemont) on summits and	0.24, 0.24	shallow to rock; gullies  Bearing Capacity: moderate	shallow to rock gullies				
7- 15%	strongly sloping backslopes with gullies; developed in residuum from arkosic sandstone and meta-graywacke	С	Shrink-swell Potential: low					
25D	Moderately deep, excessively drained, yellowish-brown coarse-loamy soils on narrow	High	POOR	POOR	SECONDARY PASTURE	VERY LOW	IVe	
Hazel loam; rocky	summits and moderately steep backslopes; 0.1 to 2% rock outcrop; developed in residuum	0.24, 0.24	shallow to rock; steep slopes; rock outcrop	shallow to rock steep slopes				
15 - 25%	from arkosic sandstone and meta-graywacke	С	Bearing Capacity: moderate Shrink-swell Potential: low	rock outcrop				
25D3**	Moderately deep, excessively drained, yellowish-brown coarse-loamy soils (Hazel)	High	POOR	POOR	NOT SUITED	LOW		
Hazel – Edgemont complex; gullied	and very deep, well drained, yellowish-brown loamy soils (Edgemont) on moderately steep	0.24, 0.24	steep slope; shallow to rock; gullies  Bearing Capacity: moderate	steep slope shallow to rock				
15-25%	backslopes with gullies; developed in residuum from arkosic sandstone and metagraywacke	С	Shrink-swell Potential: low	gullies				

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			USE POTENTIAL AND PROBLEMS FOR		SELECTED USES		
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
25E	Moderately deep, excessively drained, yellowish-brown coarse-loamy soils on steep	Very high	VERY POOR	NOT SUITED	NOT SUITED	VERY LOW	VIIe
Hazel loam; rocky	backslopes, developed in residuum from arkosic sandstone and meta-graywacke	0.24, 0.24	steep slopes; shallow to rock  Bearing Capacity: moderate	steep slopes shallow to rock			
25 - 45%		C	Shrink-swell Potential: low				
26B**	Very deep, well drained, red clayey soils on gently sloping, undulating summits; developed	Moderate	GOOD	MARGINAL	PRIME CROPLAND	MODERATELY LOW	
Culpeper fine sandy	in residuum from meta-arkosic sandstone and	0.32, 0.28		percs slowly			
loam	meta-graywacke	В	Bearing Capacity: moderate Shrink-swell Potential: low				
2 – 7%	V1111	Madanata	COOD	MADCINIAL	CECONDARY	MODERATELY	TTT -
26C	Very deep, well drained, red clayey soils on undulating summits and strongly sloping	Moderate	GOOD	MARGINAL	SECONDARY CROPLAND	MODERATELY LOW	IIIe
Culpeper fine sandy	backslopes; developed in residuum from meta-	0.32, 0.28		percs slowly			
loam	arkosic sandstone and meta-graywacke	В	Bearing Capacity: moderate Shrink-swell Potential: low				
7 – 15% 27C3	CEE MAD UNITE ACC						
28B**	SEE MAP UNIT 26C Very deep, well drained, red clayey soils	Moderate	GOOD	MARGINAL	PRIME	MODERATELY	
-	(Fauquier) and/or very deep, well drained, red		GOOD		CROPLAND	HIGH	
Fauquier and Eubanks soils	loamy soils (Eubanks) on summits and gently sloping backslopes; developed in residuum	0.32, 0.24		percs slowly			
Eudanks sons	from sheared granite or granodiorite intruded	В	Bearing Capacity: moderate				
2 - 7 %	by dikes of greenstone This map unit will		Shrink-swell Potential: moderate				
	predominantly consist of Fauquier and/or						
28C	Eubanks soils  Very deep, well drained, red clayey soils	Moderate	GOOD	MARGINAL	SECONDARY	MODERATELY	IIIe
200	(Fauquier) and/or very deep, well drained, red	Moderate	GOOD	WAKUINAL	CROPLAND	HIGH	1110
Fauquier and	loamy soils (Eubanks) on summits and	0.32, 0.24		percs slowly			
Eubanks soils	strongly sloping backslopes; developed in	_		-			
7 15 0/	residuum from sheared granite or granodiorite	В	Bearing Capacity: moderate				
7 - 15 %	intruded by dikes of greenstone This map unit will predominantly consist of Fauquier		Shrink-swell Potential: moderate				
	and/or Eubanks soils						
28C3	SEE MAP UNIT 28C						

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		EDOGION HAZARA	USE POTENTIAL AND PROBLEMS FOR		SELECTED USES			
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS	
28D	Very deep, well drained, red clayey soils	High	FAIR	MARGINAL	SECONDARY	MODERATELY	IVe	
200	(Fauquier) and very deep, well drained, red	111511	771110	MI IRON VIE	PASTURE	HIGH	110	
Fauquier and	loamy soils (Eubanks) on moderately steep	0.37, 0.24	steep slopes	steep slopes				
Eubanks soils	backslopes; developed in residuum from		•	percs slowly				
	sheared granite or granodiorite intruded by	C	Bearing Capacity: moderate					
	dikes of greenstone This map unit will		Shrink-swell Potential: moderate					
15 - 25%	predominantly consist of Fauquier and/or							
	Eubanks soils							
28D3	SEE MAP UNIT 28D							
29C	SEE MAP UNIT 28C							
29D	SEE MAP UNIT 28D							
30B**	Very deep, well drained, yellowish-brown	Moderate	FAIR	MARGINAL	PRIME	LOW		
P.1	loamy (Edneytown) soil and moderately deep,	004.004		1.11	PASTURE			
Edneytown –	well drained dark brown (Chestnut) coarse-	0.24, 0.24	shallow to rock	shallow to rock				
Chestnut complex;	loamy soil on summits and strongly sloping	В	P					
rocky	backslopes in dissected landscapes; developed	В	Bearing Capacity: moderate Shrink-swell Potential: low					
2 - 7%	in residuum from coarse-textured granite and granite gneiss; 0.1 to 2 percent rock outcrop		Shrink-swell Potential: low					
30C	Very deep, well drained, yellowish-brown	Moderate	FAIR	MARGINAL	PRIME	LOW	IIIe	
300	(Edneytown) loamy soil and moderately deep,	Moderate	TAIK	WAROINAL	PASTURE	LOW	IIIC	
Edneytown –	well drained dark brown (Chestnut) coarse-	0.24, 0.24	shallow to rock	shallow to rock	TASTORE			
Chestnut complex;	loamy soil on summits and strongly sloping	0.2 1, 0.2 1	Sharrow to rock	Shahow to rock				
rocky	backslopes in dissected landscapes; developed	В	Bearing Capacity: moderate					
	in residuum from coarse-textured granite and	_	Shrink-swell Potential: low					
7 - 15%	granite gneiss; 0.1 to 2 percent rock outcrop							
30D	Very deep, well drained, yellowish-brown	High	FAIR	MARGINAL	SECONDARY	LOW	IVe	
	(Edneytown) loamy soil and moderately deep,				PASTURE			
Edneytown -	well drained dark brown (Chestnut) coarse-	0.24, 0.24	shallow to rock; steep slopes	shallow to rock				
Chestnut complex;	loamy soil on moderately steep backslopes in		Bearing Capacity: moderate	steep slopes				
rocky	dissected landscapes; developed in residuum	В	Shrink-swell Potential: low					
	from coarse-textured granite and granite							
15 - 25%	gneiss; 0.1 to 2 percent rock outcrop							
31B	Very deep, well drained, strong brown, fine-	Moderate	FAIR	MARGINAL	PRIME	MODERATELY	IIe	
	silty (Purcellville) and moderately deep, well				CROPLAND	LOW		
Purcellville –	drained, strong brown, coarse-loamy	0.32, 0.28	shallow to rock	shallow to rock				
Tankerville complex	(Tankerville) soils on summits and gently	ъ	Bearing Capacity: moderate					
2 70/	sloping backslopes; developed in residuum	В	Shrink-swell Potential: low					
2 - 7%	from granite, granite gneiss and granitic schist							

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		EROSION HAZARD	USE POTENTIAL AND PR	OBLEMS FOR	SELECTED USES			
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS	
31C	Very deep, well drained, strong brown, fine- silty (Purcellville) and moderately deep, well	Moderate	FAIR	MARGINAL	SECONDARY CROPLAND	MODERATELY LOW	IIIe	
Purcellville – Tankerville complex	drained, strong brown, coarse-loamy (Tankerville) soils on strongly sloping backslopes; developed in residuum from	0,.32, 0.28 B	shallow to rock  Bearing Capacity: moderate	shallow to rock				
7 - 15%	granite, granite gneiss and granitic schist	Ь	Shrink-swell Potential: low					
31D 33B**	SEE MAP UNIT 20D  Moderately deep, well drained, yellowish-red silty soils on gently sloping sideslopes and	Moderate	FAIR	POOR	SECONDARY CROPLAND	MODERATELY LOW		
Brinklow silt loam	convex ridgetops; developed in residuum from sericite and biotite schist; gneiss and phyllites.	0.32, 0.32	shallow to rock <b>Bearing Capacity:</b> moderate	shallow to rock	32232			
2 - 7%		С	Shrink-swell Potential: low					
33C**	Moderately deep, well drained, yellowish-red silty soils on strongly sloping sideslopes;	Moderate	FAIR	POOR	SECONDARY CROPLAND	MODERATELY LOW		
Brinklow silt loam	developed in residuum from sericite and biotite schist; gneiss and phyllites.	0.32, 0.32	shallow to rock  Bearing Capacity: moderate	shallow to rock				
7 – 15%		С	Shrink-swell Potential: low					
33D	Moderately deep, well drained, yellowish-red silty soils on moderatley steep backslopes;	High	POOR	POOR	PRIME PASTURE	MODERATELY LOW	IVe	
Brinklow silt loam 15 - 25%	developed in residuum from sericite and biotite schist; gneiss and phyllites.	0.32, 0.32 C	shallow to rock; steep slopes  Bearing Capacity: moderate  Shrink-swell Potential: low	shallow to rock steep slopes				
	M. I. ala di Barata di Bar				GEGOVE LEV	MODER	¥ ***	
33E Brinklow silt loam	Moderately deep, well drained, yellowish-red silty soils on steep sideslopes; developed in residuum from sericite and biotite schist;	High 0.32, 0.32	VERY POOR shallow to rock; very steep slopes	NOT SUITED	SECONDARY PASTURE	MODERATELY LOW	VIIe	
25 - 45%	gneiss and phyllites.	0.32, 0.32 C	Bearing Capacity: moderate Shrink-swell Potential: low	shallow to rock very steep slopes				
34B	Very deep, well drained, yellowish-red clayey soils on summits and gently sloping	Moderate	GOOD	MARGINAL	PRIME CROPLAND	LOW	IIe	
Yellowbottom loam	backslopes; developed in residuum from sericite, biotite schists and meta-monzanite	0.43, 0.28	Bearing Capacity: moderate	percs slowly	32232			
3 - 8%	granite	В	Shrink-swell Potential: moderate					
34C	Very deep, well drained, yellowish-red clayey soils on strongly sloping backslopes;	Moderate	GOOD	MARGINAL	SECONDARY CROPLAND	LOW	IIIe	
Yellowbottom loam	developed in residuum from sericite, biotite schists and meta-monzanite granite	0.43, 0.28	Bearing Capacity: moderate	percs slowly				

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		DD GGYGVY	USE POTENTIAL AND PR	POTENTIAL AND PROBLEMS FOR		SELECTED USES		
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS	
34D**	Very deep, well drained, yellowish-red clayey soils on sideslopes and dissected uplands;	High	FAIR	MARGINAL	PRIME PASTURE	LOW		
Yellowbottom loam	developed in residuum from sericite and biotite schists and gneiss	0.43, 0.28	steep slopes  Bearing Capacity: moderate	percs slowly steep slopes				
15 – 25%		В	Shrink-swell Potential: moderate					
35B	Very deep, well drained, red clayey soils on summits and gently sloping backslopes in	Moderate	GOOD	MARGINAL	PRIME CROPLAND	MODERATELY LOW	IIe	
Penhook silt loam	dissected uplands; developed in residuum from	0.43, 0.28	<b>D</b> • C • 1	percs slowly				
3 – 8%	sericite schist, phyllonite, and phyllite	В	Bearing Capacity: moderate Shrink-swell Potential: moderate					
35C	Very deep, well drained, red clayey soils strongly sloping backslopes in dissected	Moderate	GOOD	MARGINAL	SECONDARY CROPLAND	MODERATELY LOW	IIIe	
Penhook silt loam	uplands; developed in residuum from sericite	0.43, 0.28	<b>D</b> • C • 1	percs slowly				
8 - 15%	schist, phyllonite, and phyllite	В	Bearing Capacity: moderate Shrink-swell Potential: moderate					
35D**	Very deep, well drained, red clayey soils moderately steep backslopes in dissected	High	FAIR	MARGINAL	PRIME PASTURE	MODERATELY LOW		
Penhook silt loam	uplands; developed in residuum from sericite schist, phyllonite, and phyllite	0.43, 0.28	steep slopes  Bearing Capacity: moderate	percs slowly steep slopes				
15 - 25%		В	Shrink-swell Potential: moderate					
36C3	SEE MAP UNIT 35C							
38A**	Very deep, moderately well drained, brownish-yellow loamy soils with intermittent	Slight	VERY POOR	POOR	SECONDARY CROPLAND	MODERATELY HIGH		
Swampoodle loam	high water tables on broad summits and slight depressions; shrink-swell clays may occur in	0.28, 0.28	intermittent high water table; possible shink-swell clays	high water table				
0 - 2%	lower subsoil of some soil profiles; developed in local colluvium and residuum from granitic rocks; may have HYDRIC soil inclusions	В	Bearing Capacity: low Shrink-swell Potential: high					
38B	Very deep, moderately well drained, mottled brownish-yellow and strong brown loamy soils	Moderate	VERY POOR	POOR	SECONDARY CROPLAND	MODERATELY HIGH	IIe	
Swampoodle loam	with intermittent high water tables on broad summits and slight depressions; may have	0.28, 0.28	intermittent high water table; possible shink-swell clays	high water table				
2 - 7%	shrink-swell clay in subsoil; developed in local colluvium and residuum from granitic rocks; may have HYDRIC soil inclusions	В	Bearing Capacity: low Shrink-swell Potential: high					

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		USE POTENTIAL AND PROBLEMS FOR			SELECTED USES			
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND US CAPABILIT CLASS	
40B**	Deep, well drained, strong brown silty soils on summits and gently sloping backslopes;	Moderate	FAIR	MARGINAL	PRIME CROPLAND	MODERATE		
Myersville silt loam	developed in residuum from greenstone and cloritic schist	0.32, 0.17	shallow to rock <b>Bearing Capacity:</b> moderate	Shallow to rock				
2 - 7%		В	Shrink-swell Potential: low					
40C	Deep, well drained, strong brown silty soils on summits and strongly sloping backslopes;	High	FAIR	MARGINAL	SECONDARY CROPLAND	MODERATE	IIIe	
Myersville silt loam	developed in residuum from greenstone and cloritic schist	0.32, 0.17	shallow to rock <b>Bearing Capacity:</b> moderate	shallow to rock	CROTERIO			
7 - 15%	cionale semsi	В	Shrink-swell Potential: low					
40D	Deep, well drained, strong brown silty soils on moderately steep backslopes; stones cover	High	POOR	POOR	SECONDARY PASTURE	MODERATELY LOW	VIs	
Myersville silt loam, stony	0.02 – 0.1% of the soil surface; developed in residuum from greenstone and cloritic schist	0.32, 0.17 B/C	steep slopes; shallow to rock  Bearing Capacity: moderate  Shrink-swell Potential: low	steep slopes shallow to rock				
15 - 25%								
40E	Moderately deep, well drained, strong brown silty soils on steep and very steep backslopes;	Very high	VERY POOR	NOT SUITED	NOT SUITED	MODERATELY LOW	VIIe	
Pignut silt loam, stony	with cobbles and stones ranging from .01 – 0.1% on the soil surface; developed in	0.32, 0.17	very steep slopes; shallow to rock  Bearing Capacity: moderate	steep slopes shallow to rock				
25 - 45 %	residuum from greenstone and cloritic schist	С	Shrink-swell Potential: low					
41B**	Very deep, well drained, yellowish red silty soils (Alanthus) and moderately deep, well	Moderate	FAIR	MARGINAL	SECONDARY PASTURE	MODERATE		
Alanthus – Pignut complex; very stony	drained, strong brown silty soils (Pignut) on summits and gently sloping backslopes;	0.28, 0.17	shallow to rock; stoniness	shallow to rock				
2 - 7 %	surface cover is represented by $.05 - 4\%$ stones, $0 - 4\%$ cobbles and $0 - 0.1\%$ rock outcrop; developed in residuum from greenstone	С	Bearing Capacity: moderate Shrink-swell Potential: low					
41C	Very deep, well drained, yellowish red silty soils (Alanthus) and moderately deep, well	Moderate	FAIR	MARGINAL	SECONDARY PASTURE	MODERATE	VIIs	
Alanthus – Pignut complex; very stony	drained, strong brown silty soils (Pignut) on strongly sloping backslopes; surface cover is	0.28, 0.17	shallow to rock; stoniness	shallow to rock	·			
7 - 15 %	represented by $0.1 - 3\%$ stones, $0 - 3\%$ cobbles and $0 - 0.01\%$ rock outcrop; developed in residuum from greenstone	С	Bearing Capacity: moderate Shrink-swell Potential: low					

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		USE POTENTIAL AND PROBLEMS FOI EROSION HAZARD			SELECTED USES			
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS	
41D	Moderately deep, well drained, strong brown (Pignut) and very deep, well drained,	High	POOR	POOR	NOT SUITED	MODERATELY LOW	VIIs	
Pignut - Alanthus	yellowish red (Alanthus) silty soils on steep	0.28, 0.17	shallow to rock; steep slopes;	shallow to rock		20		
complex, extremely	backslopes; surface cover is represented by 3 –		stoniness	steep slopes				
stony	15% stones, $0 - 3\%$ cobbles and $0 - 0.01\%$	C						
15 250/	rock outcrop; developed in residuum from		Bearing Capacity: moderate					
15 - 25%	greenstone and cloritic schist	X7 1:1	Shrink-swell Potential: low	NOT CHITED	NOT CHITED	MODERATELY	3711	
41E	Moderately deep, well drained, strong brown silty soils on steep and very steep backslopes;	Very high	VERY POOR	NOT SUITED	NOT SUITED	MODERATELY LOW	VIIs	
Pignut silt loam,	surface cover is represented by $3 - 15\%$	0.28, 0.17	shallow to rock; very steep slopes;	very steep slopes				
extremely stony	stones, $0 - 3\%$ cobbles and $0 - 0.01\%$ rock	ŕ	stoniness	shallow to rock				
	outcrop; developed in residuum from	C	Bearing Capacity: moderate					
25 - 45%	greenstone and cloritic schist		Shrink-swell Potential: low					
42C**	Moderately deep, well drained, strong brown silty soils and 10 – 25 % rock outcrop on	Moderate	POOR	NOT SUITED	NOT SUITED	MODERATELY LOW		
Pignut - Rock	strongly sloping backslopes; surface cover is	0.24, 0.17	rock outcrops					
Outcrop complex	represented by $1 - 15\%$ cobbles, $3 - 25\%$	~	Bearing Capacity: moderate	rock outcrops				
7 150/	stones, and $0 - 20\%$ boulders; developed in	С	Shrink-swell Potential: low					
7 - 15% 42D	residuum from greenstone and cloritic schist  Moderately deep, well drained, strong brown	TT: -L	DOOD.	NOT CHITED	NOT SUITED	MODERATELY	VIIs	
	silty soils and 15 – 25 % rock outcrop on	High	POOR	NOT SUITED	NOT SUITED	LOW	VIIS	
Pignut - Rock	moderately steep backslopes; surface cover is	0.24, 0.17	steep slopes; rock outcrops	steep slopes				
Outcrop complex	represented by $0 - 15\%$ cobbles, $3 - 25\%$	C	Bearing Capacity: moderate	rock outcrops				
15 250/	stones, and $0 - 20\%$ boulders; developed in residuum from greenstone and cloritic schist	С	Shrink-swell Potential: low					
15 - 25% 42E	Moderately deep, well drained, strong brown	Very High	VERY POOR	NOT SUITED	NOT SUITED	MODERATELY	VIIs	
42L	silty soils and 15 – 25 % rock outcrop on steep	very mgn	VERTIOOR	NOTSCITED	NOT SOTTED	LOW	V 113	
Pignut - Rock	and very steep backslopes; surface cover is	0.24, 0.17	very steep slopes; rock outcrops	steep slopes				
Outcrop complex	represented by $0 - 15\%$ cobbles, $3 - 25\%$		Bearing Capacity: moderate	rock outcrops				
25 450/	stones, and $0 - 20\%$ boulders; developed in	C	Shrink-swell Potential: low					
25 - 45% 43B**	residuum from greenstone and cloritic schist	M 1 4	COOP	COOD	DDIME	IHCH		
43B**	Very deep, well drained, yellowish-red silty soils on summits and gently sloping	Moderate	GOOD	GOOD	PRIME CROPLAND	HIGH		
Alanthus silt loam	backslopes; developed in residuum from	0.37, 0.28						
	greenstone and cloritic schist		Bearing Capacity: moderate					
2 – 7%		В	Shrink-swell Potential: low					
43C	Very deep, well drained, yellowish-red silty soils on strongly sloping backslopes;	High	GOOD	GOOD	SECONDARY CROPLAND	HIGH	IIIe	
Alanthus silt loam	developed in residuum from greenstone and	0.37, 0.28						
	cloritic schist	-	Bearing Capacity: moderate					
7 - 15%		В	Shrink-swell Potential: low					
43D	SEE MAP UNIT 40D							
44B3	SEE MAP UNIT 45B							

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		EDOGIONI II A ZA ZZ	USE POTENTIAL AND PRO	OBLEMS FOR		SELECTED USES		
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS	
44C3	SEE MAP UNIT 45C							
44D3	SEE MAP UNIT 45D							
45B	Very deep, well drained, red clayey soils on undulating summits and gently sloping	Moderate	GOOD	MARGINAL	PRIME CROPLAND	MODERATELY HIGH	IIe	
Fauquier silt loam	backslopes; developed in residuum from massive greenstone and cloritic schist	0.37, 0.28	Bearing Capacity: moderate	percs slowly				
2 - 7%		В	Shrink-swell Potential: moderate					
45C	Very deep, well drained, red clayey soils on strongly sloping backslopes; developed in	High	GOOD	MARGINAL	SECONDARY CROPLAND	MODERATELY HIGH	IIIe	
Fauquier silt loam	residuum from massive greenstone and cloritic schist	0.37, 0.28	Bearing Capacity: moderate	percs slowly				
7 - 15%		В	Shrink-swell Potential: moderate					
45D	Very deep, well drained, red clayey soils on moderately steep backslopes; developed in	Very high	FAIR	MARGINAL	PRIME PASTURE	MODERATELY HIGH	IVe	
Fauquier silt loam	residuum from massive greenstone and cloritic schist	0.37, 0.28	steep slopes <b>Bearing Capacity:</b> moderate	steep slopes percs slowly				
15-25 %		В	Shrink-swell Potential: moderate					
46C	SEE MAP UNIT 41C							
47B	Complex of very deep, well drained, micaceous, dark red clayey (Elioak) and red	Moderate	GOOD	MARGINAL	PRIME CROPLAND	MODERATELY HIGH	IIe	
Elioak - Fauquier	clayey (Fauquier) soils on summits and gently	0.37, 0.28		Percs slow				
complex 2 - 7%	sloping backslopes; developed in residuum from micaeous acid crystalline rock and cloritic schist	В	Bearing Capacity: moderate Shrink-swell Potential: moderate					
47C	Complex of very deep, well drained, micaceous, dark red clayey (Elioak) and red	High	GOOD	MARGINAL	SECONDARY CROPLAND	MODERATELY HIGH	IIIe	
Elioak - Fauquier complex	clayey (Fauquier) soils on undulating summits and strongly sloping backslopes; developed in	0.37, 0.28	Bearing Capacity: moderate	Percs slow	CROTE/IND	mon		
7 - 15%	residuum from micaeous acid crystalline rock and cloritic schist	В	Shrink-swell Potential: moderate					
47D**	Complex of very deep, well drained,	High	FAIR	MARGINAL	PRIME	MODERATELY		
	micaceous, yellowish-red clayey (Elioak) soils				PASTURE	HIGH		
Elioak - Fauquier	and red clayey (Fauquier) soils on moderately	0.37, 0.28	steep slopes	percs slow				
complex	steep backslopes; developed in residuum from micaceous acid rocks (Elioak) and inclusions	В	Bearing Capacity: moderate Shrink-swell Potential: moderate	steep slopes				
15 - 25%	containing bands and stringers of greenstone (Fauquier)							

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		EDOGION HAZARR	USE POTENTIAL AND PRO	OBLEMS FOR	5	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
48A**	Complex of deep, moderately well drained, light yellowish-brown clay (Fletcherville) and	Moderate	POOR	POOR	PRIME CROPLAND	MODERATELY HIGH	
Fletcherville – Myersville complex	deep, well drained, strong brown silty (Myersville) soils in saddles and heads of	0.37, 0.28	intermittent high water table and high shrink-swell clays occur locally	high water table			
0 - 2 %	drainageways; developed in residuum from greenstone schist	С	Bearing Capacity: low Shrink-swell Potential: high				
48B	Complex of deep, moderately well drained, light yellowish-brown clay (Fletcherville) and	Moderate	POOR	POOR	PRIME CROPLAND	MODERATELY HIGH	IIe
Fletcherville – Myersville complex 2 - 7 %	deep, well drained, strong brown silty (Myersville) soils in saddles and heads of drainageways; developed in residuum from greenstone schist	0.37, 0.28 C	intermittent high water table and high shrink-swell clays occur locally Bearing Capacity: low Shrink-swell Potential: high	high water table			
48C**	Complex of deep, well drained, strong brown silty (Myersville) and deep, moderately well	High	POOR	POOR	SECONDARY CROPLAND	MODERATELY HIGH	
Myersville - Fletcherville complex	drained, light yellowish-brown clay (Fletcherville) soils on strongly sloping backslopes; developed in residuum from	0.37, 0.28 C	intermittent high water table and high shrink-swell clays occur locally Bearing Capacity: low	high water table	CROTLAND	mon	
7 - 15 %	greenstone schist		Shrink-swell Potential: high				
49C	SEE MAP UNIT 47C						
49C3	SEE MAP UNIT 47C						
50B	Very deep, moderately well drained, yellowish-brown loamy fragipan soil on broad,	Slight	FAIR	POOR	PRIME PASTURE	LOW	IIIs
Goldvein fine gravely silt loam	flat summits and gently sloping backslopes; developed in residuum from quartz monzonite	0.28, 0.28	intermittent high water table  Bearing Capacity: moderate	intermittent high water table			
3 - 8%	and granite pegmatites	C	Shrink-swell Potential: moderate	Fragipan			
50C	Very deep, moderately well drained, yellowish-brown loamy fragipan soil on	Moderate	FAIR	POOR	PRIME PASTURE	LOW	IVs
Goldvein fine gravely silt loam	strongly sloping backslopes; developed in residuum from quartz monzonite and granite	0.28, 0.28	intermittent high water table  Bearing Capacity: moderate	intermittent high water table fragipan	THOTORE		
8 - 15%	pegmatites	C	Shrink-swell Potential: moderate	water table magipan			
51D	Moderately deep, well drained, strong brown loamy soils containing more than 35% rock	High	VERY POOR	NOT SUITED	NOT SUITED	VERY LOW	VIIs
Stumptown-Rock Outcrop complex	fragments and $10-20$ % rock outcrop on summits and moderately steep backslopes; soil	0.20, 0.10	steep slopes; shallow to rock <b>Bearing Capacity:</b> moderate	shallow to rock steep slopes			
15 - 25%	surface is covered with $0-15$ % flagstones and/or boulders; developed from local creep and residuum from interbedded quartzite, quartz muscovite schist and phyllite	В	Shrink-swell Potential: low	rock outcrop			

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		-	USE POTENTIAL AND PRO	OBLEMS FOR	S	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
51D		** **: 1	A WERNA DO OR	NOT GUITED	NOT OF WEED	VEDVI OW	****
51E	Moderately deep, well drained, strong brown loamy soils containing more than 35% rock	Very High	VERY POOR	NOT SUITED	NOT SUITED	VERY LOW	VIIs
Stumptown-Rock	fragments and 10 – 20 % rock outcrop on steep	0.20, 0.10	very steep slopes; shallow to rock				
Outcrop complex	backslopes; soil surface is covered with $0 - 15$	0.20, 0.10	Bearing Capacity: moderate	shallow to rock			
outerop complem	% flagstones and/or boulders; developed from	В	Shrink-swell Potential: low	very steep slopes			
25 - 45%	local creep and residuum from interbedded			rock outcrop			
	quartzite, quartz muscovite schist and phyllite			1			
52C	SEE MAP UNIT 53C						
52D	SEE MAP UNIT 53D						
52D2	SEE MAP UNIT 53D						
53B**	Very deep, well drained, micaceous, dark brown loamy soils on summits and gently	Moderate	GOOD	GOOD	PRIME CROPLAND	MODERATE	
Glenelg loam	sloping backslopes; developed in residuum from micaceous acid crystalline rock	0.32, 0.43	high mica content in substratum may interfere with compaction				
2 - 7%		В	Bearing Capacity: low Shrink-swell Potential: low				
53C	Very deep, well drained, micaceous, dark brown loamy soils on undulating summits and	High	GOOD	GOOD	SECONDARY CROPLAND	MODERATE	IIIe
Glenelg loam	strongly sloping backslopes; developed in residuum from micaceous acid crystalline rock	0.32, 0.43	high mica content in substratum may interfere with compaction				
7 - 15%		В	Bearing Capacity: low Shrink-swell Potential: low				
53D	Very deep, well drained, micaceous, yellowish-red loamy soils on sloping	Very high	FAIR	MARGINAL	PRIME PASTURE	MODERATE	IVe
Glenelg loam	sideslopes in dissected uplands; developed in residuum from mica schist and mica gneiss	0.32, 0.43	high mica content in substratum may interfere with compaction; steep	Steep slopes			
15 - 25%		В	slopes Bearing Capacity: low Shrink-swell Potential: low				
53E	SEE MAP UNIT 33E						
53E3	SEE MAP UNIT 33E						
54B	SEE MAP UNIT 55B						
54C	SEE MAP UNIT 55C						
55B	Very deep, well drained, micaceous, dark red clayey soils on broad summits and gently	Moderate	GOOD	GOOD	PRIME CROPLAND	MODERATELY HIGH	IIe
Elioak loam	sloping backslopes; developed in residuum from micaceous acid crystalline rocks	0.37, 0.32	high mica content in substratum may interfere with compaction				
2 - 7%	•	В	Bearing Capacity: moderate Shrink-swell Potential: moderate				

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		EDOGION W. Z. D.	USE POTENTIAL AND PRO	OBLEMS FOR	SELECTED USES		
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
55C	Very deep, well drained, micaceous, dark red clayey soils on undulating summits and	High	GOOD	GOOD	SECONDARY CROPLAND	MODERATELY HIGH	IIIe
Elioak loam	strongly sloping backslopes; developed in residuum from micaceous acid crystalline	0.37, 0.32	high mica content in substratum may interfere with compaction				
7 - 15%	rocks	В	Bearing Capacity: moderate Shrink-swell Potential: moderate				
55C3	SEE MAP UNIT 55C						
55D	SEE MAP UNIT 33D						
55D3	SEE MAP UNIT 33D						
56B**	Moderately deep, somewhat excessively drained, olive gray silty soils containing more	Moderate	FAIR	MARGINAL	SECONDARY CROPLAND	LOW	
Watt silt loam	than 35% rock fragments on gently sloping summits and backslopes; developed in	0.32, 0.20	shallow to rock; high silt content (low bearing capacity); high	shallow to rock			
2 - 7%	residuum from black graphitic schist	В	corrosivity to steel and concrete  Bearing Capacity: low  Shrink-swell Potential: low				
56C**	Moderately deep, somewhat excessively drained, olive gray silty soils containing more	High	FAIR	POOR	SECONDARY CROPLAND	LOW	
Watt silt loam	than 35% rock fragments on sloping summits and backslopes; developed in residuum from	0.32, 0.20	shallow to rock; high silt content (low bearing capacity); high	shallow to rock			
7-15%	black graphitic schist	В	corrosivity to steel and concrete Bearing Capacity: low Shrink-swell Potential: low				
56D	Moderately deep, somewhat excessively drained, olive gray silty soils containing more	Very High	POOR	POOR	PRIME PASTURE	LOW	IVe
Watt silt loam	than 35% rock fragments on strongly sloping through very steep backslopes and strongly	0.32, 0.20	shallow to rock; steep slopes; high silt content (low bearing capacity);	shallow to rock steep slopes			
15 - 25%	sloping summits; developed in residuum from black graphitic schist	В	high corrosivity to steel and concrete Bearing Capacity: low Shrink-swell Potential: low				
56E	Moderately deep, somewhat excessively drained, olive gray silty soils containing more	Very high	VERY POOR	NOT SUITED	SECONDARY PASTURE	LOW	
Watt silt loam	than 35% rock fragments on steep to very steep backslopes; developed in residuum from	0.32, 0.20	shallow to rock; steep slopes; high silt content (low bearing capacity);	shallow to rock very steep slopes			
25-45%	black graphitic schist	В	high corrosivity to steel and concrete Bearing Capacity: low Shrink-swell Potential: low	, rr			

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

			USE POTENTIAL AND PR	OBLEMS FOR		SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
56F	Moderately deep, somewhat excessively	Very high	VERY POOR	NOT SUITED	NOT SUITED	LOW	
Watt silt loam	drained, olive gray silty soils containing more than 35% rock fragments on very steep	0.32, 0.20	shallow to rock; steep slopes; high	shallow to rock			
watt siit ioaiii	backslopes; developed in residuum from black	0.32, 0.20	silt content (low bearing capacity);	very steep slopes			
45 - 65%	graphitic schist	D	high corrosivity to steel and concrete Bearing Capacity: low Shrink-swell Potential: low	very steep stopes			
57B	SEE MAP UNIT 55B						
57C	SEE MAP UNIT 55C						
58B	SEE MAP UNIT 53C						
58C	SEE MAP UNIT 53C						
58D	SEE MAP UNIT 53D						
58E	SEE MAP UNIT 33E						
59B**	Very deep, somewhat poorly drained, yellowish brown loamy soils with high water	Moderate	VERY POOR	NOT SUITED	NOT SUITED	MODERATELY LOW	
Mongle loam,	tables in concave landscapes, along small	0.43, 0.43	high water table; overland flow-	high water table			
rubbly	drainageways and on alluvial fans; developed		significant destructive potential				
	in recent colluvium/alluvium washed from	D	during storm events				
2 - 7%	basic and acidic rocks; 15 – 50 % cobbles,		Bearing Capacity: low				
	stones and/or boulders cover the soil surface; may have HYDRIC soil inclusions		Shrink-swell Potential: moderate				
59C	Very deep, somewhat poorly drained,	Moderate	VERY POOR	NOT SUITED	NOT SUITED	MODERATELY	VIIs
390	yellowish brown loamy soils with high water	Moderate	VERT POOR	NOT SUITED	NOT SUITED	LOW	VIIS
Mongle loam,	tables in concave landscapes, along small	0.43, 0.43	high water table; overland flow-	high water table		LOW	
rubbly	drainageways and on alluvial fans; developed	0.15, 0.15	significant destructive potential	mgn water table			
,	in recent colluvium/alluvium washed from	D	during storm events				
7 - 15%	basic and acidic rocks; 15 – 50 % cobbles,		Bearing Capacity: low				
	stones and/or boulders cover the soil surface;		Shrink-swell Potential: moderate				
	may have HYDRIC soil inclusions						
60A**	Complex of moderately deep, well drained, dark yellowish brown (Ott) soil and shallow,	Slight	FAIR	NOT SUITED	SECONDARY CROPLAND	LOW	
Ott-Catlett complex	well drained, loamy-skeletal, dark gray	0.32, 0.10	shallow to rock	shallow to rock			
	(Catlett) soils containing more than 35% rock		Bearing Capacity:				
0 - 3%	fragments on summits and gently sloping	C	Shrink-swell Potential:				
	backslopes, developed in residuum from						
	bluish-gray thermally altered Triassic shale						

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

			USE POTENTIAL AND PRO	OBLEMS FOR	SELECTED USES			
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS	
COD	Complex of moderately deep, well drained,	Madameta	FAIR	NOT SUITED	SECONDARY	LOW	IIIs	
60B	dark yellowish brown (Ott) soil and shallow,	Moderate	raik	NOT SUITED	CROPLAND	LOW	1118	
Ott-Catlett complex	well drained, loamy-skeletal, dark gray	0.32, 0.10	shallow to rock	shallow to rock	CROTEMINE			
	(Catlett) soils containing more than 35% rock	· · · · · · · · · · · · · · · · · · ·	Bearing Capacity: low					
3 - 8%	fragments on summits and gently sloping	C	Shrink-swell Potential: low					
	backslopes; developed in residuum from							
	bluish-gray thermally altered Triassic shale							
60C	Complex of moderately deep, well drained,	High	FAIR	NOT SUITED	PRIME	LOW	IVs	
0000000	dark yellowish brown (Ott) soil and shallow,	0.22 0.10	1.11	1 11	PASTURE			
Ott-Catlett complex	well drained, loamy-skeletal, dark gray (Catlett) soils containing more than 35% rock	0.32, 0.10	shallow to rock	shallow to rock				
8 - 15%	fragments on strongly sloping backslopes;	С	Bearing Capacity: low Shrink-swell Potential: low					
0 - 1370	developed in residuum from bluish-gray	C	Sill lik-swell I delitial. 10w					
	thermally altered Triassic shale							
60D**	Shallow, well drained, grayish-brown silty	High	POOR	NOT SUITED	SECONDARY	LOW		
	soils containing more than 35% rock				PASTURE			
Catlett gravelly silt	fragments on moderately steep sideslopes;	0.32, 0.10	shallow soils over bedrock, steep	shallow to rock				
loam	developed in residuum from bluish-gray	_	slopes	steep slopes				
15 250/	thermally altered Triassic shale	С	Bearing Capacity: low					
15 - 25%			Shrink-swell Potential: low					
62A**	Moderately deep, moderately well to	Slight	POOR	NOT SUITED	SECONDARY	MODERATE		
0211	somewhat poorly drained, brown silty soils	Slight	TOOK	NOT SCITED	CROPLAND	WODERITE		
Sycoline silt loam	with intermittent high water tables on nearly	0.43, 0.43	intermittent high water table; low	high water table				
Ž	level summits backslopes; developed in		bearing capacities when wet;	· ·				
0 - 3%	residuum from bluish-gray thermally altered	D	shallow to rock					
	Triassic shale and siltstone		Bearing Capacity: low					
			Shrink-swell Potential: low					
62B	Moderately deep, moderately well to	Moderate	POOR	NOT SUITED	SECONDARY	MODERATE	IIe	
V-D	somewhat poorly drained, brown silty soils	moderate	- 0 OIC	TOT BUILD	CROPLAND	MODERATIE	110	
Sycoline silt loam	with intermittent high water tables on gently	0.43, 0.43	intermittent high water table; low	high water table				
•	sloping summits and backslopes; developed in		bearing capacities when wet; shallow	•				
3 - 8%	residuum from bluish-gray thermally altered	D	to rock					
	Triassic shale and siltstone		Bearing Capacity: low					
<b>60.1</b>		au .	Shrink-swell Potential: low	NOT OF THE PARTY.	andore:	1.00000		
63A	Moderately deep, somewhat poorly drained,	Slight	VERY POOR	NOT SUITED	SECONDARY	MODERATE	IVw	
Kelly Variant silt	yellowish-brown claypan soils with intermittent high water tables on broad upland	0.37, 0.28	high shrink-swell clay layers in the	high water table	PASTURE			
loam	flats and concave areas; developed in old	0.37, 0.20	subsoil; high water table; low relief	ingii watei tabie				
TOUTH	alluvial capping underlain by residuum from	D	Bearing Capacity: low					
0 - 3%	thermally-altered Triassic shales and granulite;	_	Shrink-swell Potential: very high					
	may have HYDRIC soil inclusions							

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

			USE POTENTIAL AND PRO	OBLEMS FOR	S	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
63B**	Moderately deep, somewhat poorly drained, yellowish-brown claypan soils with	Moderate	VERY POOR	NOT SUITED	SECONDARY PASTURE	MODERATE	
Kelly Variant silt	intermittent high water tables on broad upland	0.37, 0.28	high shrink-swell clay layers in the	high water table			
loam	flats and concave areas; developed in old	D	subsoil; high water table; low relief				
3 - 8%	alluvial capping underlain by residuum from thermally-altered Triassic shales and granulite; may have HYDRIC soil inclusions	D	Bearing Capacity: low Shrink-swell Potential: very high				
63C**	Moderately deep, somewhat poorly drained, yellowish-brown claypan soils with	High	VERY POOR	NOT SUITED	SECONDARY PASTURE	MODERATE	
Kelly Variant silt loam	intermittent high water tables in saddles and heads of drainageways; developed in old	0.37, 0.28	high shrink-swell clay layers in the subsoil; high water table	high water table			
8 - 15%	alluvial capping underlain by residuum from thermally-altered Triassic shales and granulite; may have HYDRIC soil inclusions	D	Bearing Capacity: low Shrink-swell Potential: very high				
64B	Complex of well drained, moderately deep, yellowish-red, loamy skeletal (Oakhill)	Moderate	FAIR	MARGINAL	SECONDARY CROPLAND	MODERATE	IIIs
Oakhill - Legore loams	containing more than 35% rock fragments in the subsoil and very deep, yellowish-red loamy	0.32, 0.28	shallow to rock  Bearing Capacity: moderate	shallow to rock			
3 - 8%	(Legore) soils on broad summits; developed in residuum from basalt	В	Shrink-swell Potential: low				
64C	Moderately deep, well drained, yellowish-red loamy-skeletal soils containing more than 35%	Moderate	FAIR	POOR	PRIME PASTURE	MODERATE	IVs
Oakhill loam	rock fragments in the subsoil on strongly	0.32, 0.28	shallow to rock	shallow to rock			
8 - 15%	sloping backslopes; developed in residuum from basalt	В	Bearing Capacity: moderate Shrink-swell Potential: low				
64D	Moderately deep, well drained, yellowish-red loamy-skeletal soils containing more than 35%	High	POOR	POOR	SECONDARY PASTURE	MODERATELY LOW	VIs
Oakhill loam, stony	rock fragments in the subsoil on strongly sloping backslopes; stones and cobbles cover	0.32, 0.28	shallow to rock; steep slopes  Bearing Capacity: moderate	shallow to rock steep slopes			
15 - 25%	0.01 – 0.1% of the soil surface; developed in residuum from basalt	В	Shrink-swell Potential: low				
64E**	Moderately deep, well drained, yellowish-red loamy-skeletal soils containing more than 35%	High	VERY POOR	NOT SUITED	SECONDARY PASTURE	MODERATELY LOW	
Oakhill loam, stony	rock fragments in the subsoil on steep	0.32, 0.28	shallow to rock; very steep slopes	shallow to rock			
25 - 45%	backslopes; stones and cobbles cover 0.01 – 0.1% of the soil surface; developed in residuum from basalt	В	Bearing Capacity: moderate Shrink-swell Potential: low	steep slopes			

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

			USE POTENTIAL AND PRO	OBLEMS FOR	S	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
65B**	Very deep, well drained, red clayey soils on	Moderate	GOOD	MARGINAL	PRIME	MODERATE	
03B	gently sloping backslopes and summits;	Wioderate	GOOD	WINGHVIE	CROPLAND	MODERATE	
Montalto loam	developed in residuum from diabase and basalt	0.28, 0.28		percs slowly			
3-8%		В	Bearing Capacity: moderate Shrink-swell Potential: moderate				
65C	Very deep, well drained, red clayey soils on strongly sloping backslopes and summits;	Moderate	GOOD	MARGINAL	SECONDARY CROPLAND	MODERATELY HIGH	IIIe
Montalto loam	developed in residuum from diabase and basalt	0.28, 0.28		percs slowly			
8- 15%		В	Bearing Capacity: moderate Shrink-swell Potential: moderate				
65C2	SEE MAP UNIT 65C						
66A	Deep, somewhat poorly drained, light olive brown claypan soils with intermittent high	Slight	VERY POOR	NOT SUITED	SECONDARY PASTURE	MODERATELY HIGH	IVw
Waxpool silt loam	water tables on broad nearly level summits; developed in residuum from diabase and	0.43, 0.15	extremely plastic shrink-swell claypan in the subsoil; high water	high water table			
0 - 3%	basalt; may have HYDRIC soil inclusions	D	table; low relief  Bearing Capacity: low  Shrink-swell Potential: very high				
67A**	Very deep, moderately well drained, yellowish brown to olive brown claypan soils with	Slight	VERY POOR	NOT SUITED	SECONDARY CROPLAND	MODERATELY HIGH	
Jackland and	intermittent high water tables (Jackland)	0.37, 0.10	extremely plastic shrink-swell	high water table	CITOT ELLIS	111011	
Haymarket silt	and/or very deep, well drained dark brown	_	claypan in the subsoil; intermittent				
loams	claypan soils (Haymarket) on nearly level	D	high water table				
	summits and backslopes; developed in residuum from diabase and basalt This		Bearing Capacity: low Shrink-swell Potential: very high				
0 - 3%	map unit will predominantly consist of Jackland and/or Haymarket soils		Shrink-swen rotential. Very high				
67B	Very deep, moderately well drained, yellowish brown to olive brown claypan soils with	Moderate	VERY POOR	NOT SUITED	SECONDARY CROPLAND	MODERATELY HIGH	IIe
Jackland and Haymarket silt	intermittent high water tables (Jackland) and/or very deep, well drained dark brown	0.37, 0.10	extremely plastic shrink-swell claypan in the subsoil; intermittent	high water table			
loams	claypan soils (Haymarket) on summits and gently sloping backslopes; developed in residuum from diabase and basalt <b>This</b>	D	high water table  Bearing Capacity: low  Shrink-swell Potential: very high				
3 - 8%	map unit will predominantly consist of Jackland and/or Haymarket soils						

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

			USE POTENTIAL AND PRO	OBLEMS FOR	<u> </u>	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
67C	Very deep, moderately well drained, yellowish brown to olive brown claypan soils with	High	VERY POOR	NOT SUITED	PRIME PASTURE	MODERATELY HIGH	IIIe
Jackland and	intermittent high water tables (Jackland)	0.37, 0.10	extremely plastic shrink-swell	high water table	PASTURE	піоп	
Haymarket silt	and/or very deep, well drained dark brown	0.57, 0.10	claypan in the subsoil; intermittent	mgn water table			
loams	claypan soils (Haymarket) on strongly sloping	D	high water table				
TOWING.	backslopes; developed in residuum from	2	Bearing Capacity: low				
	diabase and basalt This map unit will		Shrink-swell Potential: very high				
8 - 15%	predominantly consist of Jackland and/or						
	Haymarket soils						
68B	Very deep, moderately well drained, yellowish	Moderate	VERY POOR	NOT SUITED	SECONDARY	MODERATELY	VIs
	brown to olive brown claypan soils with				PASTURE	HIGH	
	intermittent high water tables (Jackland)	0.32, 0.10	extremely plastic shrink-swell	high water table			
Jackland and	and/or very deep, well drained dark brown		claypan in the subsoil; intermittent	stone content			
Haymarket silt	claypan soils (Haymarket) on summits and	D	high water table; large amount of				
loams, very stony	gently sloping backslopes; soil surface is		stones and boulders on the surface				
	covered by $0.2 - 4\%$ stones and $0 - 0.05$		Bearing Capacity: low				
2 00/	boulders; developed in residuum from diabase		Shrink-swell Potential: very high				
3 - 8%	and basalt This map unit will						
	predominantly consist of Jackland and/or Haymarket soils						
68C	Very deep, moderately well drained, yellowish	Moderate	VERY POOR	NOT SUITED	SECONDARY	MODERATELY	VIIs
	brown to olive brown claypan soils with				PASTURE	HIGH	
	intermittent high water tables (Jackland)	0.32, 0.10	extremely plastic shrink-swell	high water table			
Jackland and	and/or very deep, well drained dark brown		claypan in the subsoil; intermittent	stone content			
Haymarket silt	claypan soils (Haymarket) on strongly sloping	D	high water table; large amount of				
loams, very stony	backslopes; soil surface is covered by 0.2 –		stones and boulders on the surface				
	4% stones and $0 - 0.05$ boulders; developed in		Bearing Capacity: low				
	residuum from diabase and basalt This		Shrink-swell Potential: very high				
8 -15%	map unit will predominantly contain						
	Jackland and/or Haymarket soils						
69A	Deep, poorly drained, dark gray claypan soils in drainageways; formed in alluvium and	Slight	VERY POOR	NOT SUITED	SECONDARY PASTURE	MODERATE	VIw
Elbert silt loam	residuum from diabase and basalt; HYDRIC SOIL	0.43, 0.15	high shrink-swell clays; high water table; low relief	high water table			
0 - 3%	SUIL	D	,				
0 - 370		D	Bearing Capacity: low Shrink-swell Potential: very high				
			Sirink-swen i otentiai. very nign				

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

	,		USE POTENTIAL AND PRO	OBLEMS FOR	S	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
70A	Deep, somewhat poorly drained, yellowish- brown loamy over clayey soils on nearly level	Slight	POOR	NOT SUITED	PRIME PASTURE	MODERATE	IVw
Mt. Lucas loam	summits and footslopes; developed in colluvium over residuum from basalt and	0.37, 0.28	high water table; shrink-swell clay may occur in lower subsoil	high water table			
0 - 3%	diabase; may have HYDRIC soil inclusions	С	Bearing Capacity: low Shrink-swell Potential: high				
70B	SEE MAP UNIT 70A						
71A**	Very deep, well drained, reddish-brown silty soils on nearly level summits; developed in	Slight	GOOD	MARGINAL	PRIME CROPLAND	MODERATE	
Panorama Variant silt loam	residuum from red Triassic shale, siltstone and fine-grained sandstone	0.37, 0.32 B	low bearing capacity when wet (high silt content)  Bearing Capacity: low	percs slowly			
0 - 3%			Shrink-swell Potential: low				
71B	Very deep, well drained, reddish-brown silty soils on gently sloping summits and	Moderate	GOOD	MARGINAL	PRIME CROPLAND	MODERATE	IIe
Panorama Variant silt loam	backslopes; developed in residuum from red Triassic shale, siltstone and fine-grained sandstone	0.37, 0.32 B	low bearing capacity when wet (high silt content)  Bearing Capacity: low	percs slowly			
3 - 8%			Shrink-swell Potential: low				
71C**	Very deep, well drained, dark reddish-brown silty soils on broad gently sloping ridges;	Moderate	GOOD	MARGINAL	SECONDARY CROPLAND	MODERATE	
Panorama Variant silt loam	developed in residuum from red Triassic shale and sandstone	0.37, 0.32	low bearing capacity when wet (high silt content)	percs slowly			
7 - 15%		В	Bearing Capacity: low Shrink-swell Potential: low				
72C	SEE MAP UNIT 76C						
73A**	Moderately deep, well drained, red silty soils on nearly level summits, developed in	Slight	GOOD	POOR	SECONDARY CROPLAND	MODERATELY LOW	
Penn loam	residuum from Triassic shale, siltstone and fine-grained sandstone	0.37, 0.24	Bearing Capacity: low	shallow to rock			
0 - 3%		В	Shrink-swell Potential: low				
73B	Moderately deep, well drained, red silty soils on gently sloping summits and backslopes,	Moderate	GOOD	POOR	SECONDARY CROPLAND	MODERATELY LOW	IIe
Penn loam	developed in residuum from Triassic shale, siltstone and fine-grained sandstone	0.37, 0.24	Bearing Capacity: low	shallow to rock			
3 - 8%		В	Shrink-swell Potential: low				

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		ED COVOLVIA GADO	USE POTENTIAL AND PRO	OBLEMS FOR	\$	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
73C	Moderately deep, well drained, red silty soils	High	GOOD	POOR	SECONDARY	MODERATELY	IIIe
Penn loam	on strongly sloping backslopes, developed in residuum from Triassic shale, siltstone and fine-grained sandstone	0.37, 0.24	Bearing Capacity: low	shallow to rock	CROPLAND	LOW	
8 - 15%	nne-granica sandstone	В	Shrink-swell Potential: low				
73D**	Moderately deep, well drained, red silty soils on moderately steep backslopes, developed in	Very High	FAIR	POOR	PRIME PASTURE	MODERATELY LOW	
Penn loam	residuum from Triassic shale, siltstone and fine-grained sandstone	0.37, 0.24	steep slopes  Bearing Capacity: low	shallow to rock steep slopes	TASTORE	LO W	
15 – 25%	mie granieu sanastone	В	Shrink-swell Potential: low	steep stopes			
74A**	Moderately deep, moderately well drained, strong brown silty soils with intermittent high	Slight	FAIR	POOR	SECONDARY CROPLAND	MODERATE	
Ashburn silt loam	water tables on broad, nearly level upland flats; developed from thin fluvial cappings	0.37, 0.24	intermittent high water table; low bearing capacity when wet due to	shallow to rock water table	CROTEFINE		
0 - 3%	over Triassic siltstone, fine grained sandstone and shale	С	high silt content and/or shrink-swell clay in lower horizon  Bearing Capacity: low  Shrink-swell Potential: moderate	water table			
74B	Moderately deep, moderately well drained, strong brown silty soils with intermittent high	Moderate	FAIR	POOR	SECONDARY CROPLAND	MODERATE	IIe
Ashburn silt loam	water tables on broad summits and gently sloping backslopes; developed from thin	0.37, 0.24	intermittent high water table; low bearing capacity when wet	shallow to rock water table	CHOT ELLINE		
3 - 8%	fluvial cappings over Triassic siltstone, fine grained sandstone and shale	С	Bearing Capacity: low Shrink-swell Potential: moderate	water table			
75A**	Very deep, well drained, dark-red and reddish- yellow clayey soils on nearly level summits;	Slight	GOOD	MARGINAL	PRIME CROPLAND	MODERATE	
Casanova loam	developed in residuum from Triassic conglomerate, siltstone and shale	0.37, 0.28	Bearing Capacity: moderate	percs slowly	CROTEFINE		
0 - 3%	congromerate, suctione and snate	В	Shrink-swell Potential: moderate				
75B	Very deep, well drained, dark-red and reddish yellow clayey soils on gently sloping broad	Moderate	GOOD	MARGINAL	PRIME CROPLAND	MODERATE	IIe
Casanova loam	summits; developed in residuum from Triassic conglomerate, shale and siltstone	0.37, 0.28	Bearing Capacity: moderate	percs slowly	3110121111		
3 - 8%	, , , , , , , , , , , , , , , , , , ,	В	Shrink-swell Potential: moderate				

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		EDOGION HAZARS	USE POTENTIAL AND PR	USE POTENTIAL AND PROBLEMS FOR		SELECTED USES			
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS		
75C	Very deep, well drained, dark-red and reddish yellow clayey soils on strongly sloping	High	GOOD	MARGINAL	SECONDARY CROPLAND	MODERATE	IIIe		
Casanova loam	backslopes; developed in residuum from Triassic conglomerate, shale and siltstone	0.37, 0.28	Bearing Capacity: moderate	percs slowly					
8 - 15%		В	Shrink-swell Potential: moderate						
75D**	Very deep, well drained, dark-red and reddish- yellow clayey soils on moderately steep	High	FAIR	MARGINAL	PRIME PASTURE	MODERATE			
Casanova loam	backslopes; developed in residuum from	0.37, 0.28	steep slopes	percs slowly					
15 - 25%	interbedded Triassic conglomerate, shale and siltstone	В	Bearing Capacity: moderate Shrink-swell Potential: moderate	steep slopes					
76B	Complex of very deep (Sudley) and moderately deep (Oatlands) well drained	Moderate	GOOD	MARGINAL	PRIME CROPLAND	MODERATELY LOW	IIe		
Sudley-Oatlands	strong brown to reddish-brown loamy soils on	0.32, 0.15		shallow to rock					
complex	summits and gently sloping backslopes; developed in residuum from Triassic	В	Bearing Capacity: moderate Shrink-swell Potential: low						
3 - 8%	conglomerate and sandstone								
76C	Complex of very deep (Sudley) and moderately deep (Oatlands) well drained	Moderate	GOOD	MARGINAL	SECONDARY CROPLAND	MODERATELY LOW	IIIe		
Sudley-Oatlands	strong brown to reddish-brown loamy soils on	0.32, 0.15		shallow to rock					
complex	undulating summits and strongly sloping backslopes; developed in residuum from	В	Bearing Capacity: moderate Shrink-swell Potential: low						
8 - 15%	Triassic conglomerate and sandstone								
76D**	Complex of very deep (Sudley) and moderately deep (Oatlands) well drained	High	GOOD	MARGINAL	PRIME PASTURE	MODERATELY LOW			
Sudley-Oatlands	strong brown to reddish-brown loamy soils on	0.32, 0.15		shallow to rock					
complex	moderately steep backslopes; developed in residuum from Triassic conglomerate and	В	Bearing Capacity: moderate Shrink-swell Potential: low	steep slopes					
15 - 25%	sandstone								
77A**	Moderately deep, well drained dark red silty soil (Arcola) and shallow, well to excessively	Slight	FAIR	POOR	PRIME PASTURE	LOW			
Arcola - Nestoria	drained, yellowish red silty soil containing	0.32, 0.10	shallow to rock; little soil available	shallow to rock					
complex	more than 35% rock fragments in the subsoil (Nestoria), on nearly level summits; developed	C	for landscaping or grading  Bearing Capacity: low						
0 - 3%	in residuum from Triassic siltstone and shale		Shrink-swell Potential: low						
77B**	Moderately deep, well drained dark red silty soil (Arcola) and shallow, well to excessively	Moderate	FAIR	POOR	PRIME PASTURE	LOW			
Arcola - Nestoria	drained, yellowish red silty soil containing	0.32, 0.10	shallow to rock; little soil available	shallow to rock					
complex	more than 35% rock fragments in the subsoil	~	for landscaping or grading						
3 - 8%	(Nestoria), on gently sloping backslopes and summits; developed in residuum from Triassic siltstone and shale	С	Bearing Capacity: low Shrink-swell Potential: low						

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

	,	EDOGROVI I ZADD	USE POTENTIAL AND PRO	OBLEMS FOR	SI	ELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
77B3**	Moderately deep, well drained dark red silty soil (Arcola) and shallow, well to excessively	High	POOR	NOT SUITED	SECONDARY PASTURE	LOW	
Arcola - Nestoria	drained, yellowish red silty soil containing	0.32, 0.10	shallow to rock; little soil available	shallow to rock			
complex, gullied	more than 35% rock fragments in the subsoil	С	for landscaping or grading; gullies				
3 - 8%	(Nestoria), with gullies on gently sloping backslopes; developed in residuum from Triassic siltstone and shale	C	Bearing Capacity: low Shrink-swell Potential: low				
77C	Moderately deep, well drained dark red silty soil (Arcola) and shallow, well to excessively	High	FAIR	POOR	SECONDARY PASTURE	LOW	IVs
Arcola - Nestoria complex	drained, yellowish red silty soil containing more than 35% rock fragments in the subsoil	0.32, 0.10	shallow to rock; little soil available for landscaping or grading	shallow to rock			
8 - 15%	(Nestoria), with gullies on strongly sloping backslopes; developed in residuum from Triassic siltstone and shale	С	Bearing Capacity: low Shrink-swell Potential: low				
77C2	SEE MAP UNIT 77C						
77C3**	Shallow, well to excessively drained (Nestoria), and moderately deep, well drained	High	POOR	NOT SUITED	SECONDARY PASTURE	LOW	
Nestoria – Arcola complex, gullied	(Arcola) eroded reddish-brown silty soils with gullies on convex sideslopes in dissected	0.32, 0.10	shallow to rock; little soil available for landscaping or grading; gullies	shallow to rock			
8 - 15%	terrain; developed in residuum from Triassic siltstone and shale	D	Bearing Capacity: low Shrink-swell Potential: low				
77D**	Shallow, well to excessively drained reddish- brown loamy soils containing more than 35%	Very High	POOR	NOT SUITED	SECONDARY PASTURE	LOW	
Nestoria gravelly	rock fragments on moderately steep	0.32, 0.10	shallow to rock; steep slopes; little	shallow to rock			
loam	backslopes; developed in residuum from Triassic siltstone and shale	D	soil material available for landscaping or grading	Steep slopes			
15 - 25%	Thassic stitstone and share	D	Bearing Capacity: low Shrink-swell Potential: low				
77D2	SEE MAP UNIT 77E						
77E	Shallow, well to excessively drained reddish- brown loamy soils containing more than 35%	Very high	POOR	NOT SUITED	SECONDARY PASTURE	LOW	VIIe
Nestoria gravelly	rock fragments on steep backslopes; developed in residuum from Triassic siltstone and shale	0.32, 0.10	shallow to rock; very steep slopes;	shallow to rock			
loam 25 - 45%	in residuum from 1 riassic sitistone and shale	D	little soil material available for landscaping or grading  Bearing Capacity: low  Shrink-swell Potential: low	very steep slopes			
			Siiriik-sweii roteffüäl; 10W				

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

-			USE POTENTIAL AND PRO	OBLEMS FOR	9	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
78A	Deep, moderately well and somewhat poorly drained, light yellowish-brown clayey soils	Slight	VERY POOR may be within 100-year floodplain;	NOT SUITED	PRIME PASTURE	MODERATE	IVw
Dulles silt loam	with intermittent high water table water tables on broad, nearly level interfluves and concave areas; developed in local colluvium and	0.43, 0.43 D	high water table; low relief; low bearing capacity when wet due to high silt content and shrink-swell	high water table; landscape position (swale)			
0 - 3%	residuum from red Triassic shale and sandstone; may have HYDRIC soil inclusions		clay in the subsoil  Bearing Capacity: low  Shrink-swell Potential: high				
79A	Deep, poorly drained, mottled reddish-brown and gray clayey soils with intermittent high	Slight	VERY POOR	NOT SUITED	SECONDARY PASTURE	MODERATE	VIw
Albano silt loam 0 - 3%	water table water tables on upland flat and in drainageways; developed in local alluvium and residuum from red Triassic shale and sandstone; HYDRIC SOIL	0.37, 0.32 D	may be within 100-year floodplain; high water table; low relief; low bearing capacities when wet (high silt content) and high shrink-swell clay in the subsoil Bearing Capacity: low Shrink-swell Potential: high	high water table			
80B	SEE MAP UNIT 76B						
80C 81B	SEE MAP UNIT 76C	M- 1	FAID	POOR	SECONDARY	MODERATELY	т.
81B	Very deep, moderately well drained, light yellowish-brown to strong brown loamy soils	Moderate	FAIR	POOR	CROPLAND	MODERATELY LOW	IIe
Brumbaugh loam	on footslopes and toeslopes of mountains and in broad gently sloping interfluves; semi-	0.28, 0.20	high water table  Bearing Capacity: moderate	high water table			
2 - 7%	rounded stones make up 5-50% of the soil; developed in old mountain colluvium from mixed acidic and basic rocks	В	Shrink-swell Potential: low				
81C	Very deep, moderately well drained, yellowish-brown loamy soils on footslopes and	Moderate	FAIR	POOR	PRIME PASTURE	MODERATELY LOW	IIIe
Brumbaugh loam	toeslopes of mountains and in broad gently sloping interfluves; semi-rounded stones make	0.28, 0.20	high water table  Bearing Capacity: moderate	high water table			
7 - 15%	up 5-50% of the soil; developed in old mountain colluvium from mixed acidic and basic rocks	В	Shrink-swell Potential: low				
82B	Very deep, somewhat poorly drained, brownish yellow loamy soils on gently sloping	Moderate	VERY POOR	NOT SUITED	PRIME PASTURE	MODERATELY LOW	IVw
Scattersville loam, stony	footslopes; soil surface is covered by 0.01 – 0.1% stones; developed in colluvium from	0.37, 0.28	high water table; stoniness; overland flow - significant destructive	high water table		_3	
2 - 7%	felsic to mafic crystalline rock	С	potential during flooding events  Bearing Capacity: low  Shrink-swell Potential: moderate				

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

			USE POTENTIAL AND PRO	OBLEMS FOR	S	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
83C	Very deep, well drained reddish-brown clayey	Moderate	FAIR	MARGINAL	PRIME	MODERATE	IVs
Braddock gravelly loam; stony 7 - 15%	soils on footslopes, broad summits and strongly sloping backslopes; rounded stones make up 0 - 50% of the soil mass; soil surface is covered by 0.01 – 0.1% stones with some cobbles and gravel; developed in old	0.28, 0.28 B	stoniness  Bearing Capacity: moderate  Shrink-swell Potential: moderate	percs slowly stoniness	PASTURE		
84C Braddock gravelly loam; very stony 7 - 15%	colluvium from mixed acidic and basic rocks  Very deep, well drained reddish-brown clayey soils on footslopes, broad summits and strongly sloping backslopes; rounded stones make up 0 - 50% of the soil mass; soil surface is covered by 0.1 – 3% stones with some cobbles and gravel; developed in old colluvium from mixed acidic and basic rocks	Moderate 0.24, 0.24 C	VERY POOR stoniness; little soil material available for landscaping or grading Bearing Capacity: moderate Shrink-swell Potential: moderate	POOR stoniness percs slowly	SECONDARY PASTURE	MODERATE	VIIs
85C2	SEE MAP UNIT 83C						
86C2 87B** Tate loam 2 - 7%	Very deep, well drained, dark yellowish-brown soils on footslopes and benches; semi-rounded stones and cobbles make up 5-50% of the soil; developed in recent colluvium from granitic rocks	Moderate 0.28, 0.20 B	FAIR  some areas are subject to overland flow; significant destructive potential during storm events if at the base of long steep slopes  Bearing Capacity: moderate  Shrink-swell Potential: low	MARGINAL landscape position	SECONDARY CROPLAND	HIGH	
87C Tate loam 7- 15%	Very deep, well drained, dark yellowish brown soils on footslopes and benches; semi-rounded stones and cobbles make up 5-50% of the soil mass; developed in recent colluvium from granitic rocks	Moderate 0.28, 0.20 B	FAIR  some areas are subject to overland flow; significant destructive potential during storm events  Bearing Capacity: moderate  Shrink-swell Potential: low	MARGINAL landscape position	PRIME PASTURE	HIGH	IIIe
88C  Lew gravelly silt loam, very stony 7 - 15%	Very deep, well drained yellowish-red soils in swales, saddles and drainageways; rock fragments average more than 35% in the soil mass; soil surface is covered by 0.05 – 4% stones with some gravels, cobbles and boulders; developed from recent mountain colluvium of greenstone rock material	Moderate 0.17, 0.15 B	VERY POOR subject to slippage; unstable when undercut Bearing Capacity: moderate Shrink-swell Potential: low	MARGINAL steep slopes: percs slow, lateral groundwater flow	SECONDARY PASTURE	MODERATELY HIGH	VIIs

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		EROSION HAZARD	USE POTENTIAL AND PRO	OBLEMS FOR	SELECTED USES			
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS	
89C	Very deep, well drained strong brown loamy	Moderate	FAIR	GOOD	SECONDARY	LOW	VIIs	
0,0	soils on strongly sloping backslopes and	Woderate	771110	GOOD	PASTURE	2011	V 113	
Weverton gravelly	benches; gravels and flagstones range from 15	0.15, 0.10	stoniness					
loam, vey stony	- 70% of the soil mass; soil surface is covered		Bearing Capacity: moderate					
<b>5</b> 150/	with 0.1 – 4% flagstones; formed in colluvium	С	Shrink-swell Potential: low					
7 - 15%	from interbedded quartzite, quartz muscovite schist and phyllite							
89D	Very deep, well drained strong brown loamy	High	FAIR	MARGINAL	SECONDARY	LOW	VIIs	
07D	soils on moderately steep backslopes; gravels	Iligii	TAIK	MAROINAL	PASTURE	LOW	V 113	
Weverton gravelly	and flagstones range from $15 - 70\%$ of the soil	0.15, 0.10	steep slopes; stoniness	steep slopes	11101016			
loam, vey stony	mass; soil surface is covered with $0.1 - 4\%$	,	Bearing Capacity: moderate	1 1				
	flagstones; formed in colluvium from	C	Shrink-swell Potential: low					
15 - 25%	interbedded quartzite, quartz muscovite schist							
	and phyllite							
93A**	Very deep, moderately well to somewhat	Slight	FAIR	POOR	SECONDARY	MODERATELY		
D-1 1	poorly drained, yellowish-brown clayey soils with high water tables on nearly level low	0.28, 0.28	high water table	high water table	CROPLAND	LOW		
Delanco loam	terraces along major streams; developed in old	0.28, 0.28	Bearing Capacity: low	nigh water table				
0 - 2%	alluvium washed from uplands underlain by a	С	Shrink-swell Potential: moderate					
0 - 270	wide variety of rocks common to the county	C	Shrink-swen i dentiai. Moderate					
93B	Very deep, moderately well to somewhat	High	FAIR	POOR	SECONDARY	MODERATELY	IIe	
	poorly drained, yellowish-brown clayey soils	Ü			CROPLAND	LOW		
Delanco loam	with intermittent high water table water tables	0.28, 0.28	high water table	high water table				
	on gently sloping low terraces along major	_	Bearing Capacity: low					
2 - 7%	streams; developed in old alluvium washed	С	Shrink-swell Potential: moderate					
	from uplands underlain by a wide variety of							
94B	rocks common to the county  Very deep, well drained, strong brown loamy	Moderate	FAIR	MARGINAL	PRIME	MODERATELY	IIe	
) <del>1</del> D	soils on low terraces along major streams,	Moderate	TAIK	MAROINAL	CROPLAND	HIGH	IIC	
Elsinboro loam	developed in old alluvium washed from	0.28, 0.28	may be within 100-year floodplain;	infrequent flood	CHOT ELL (B	111011		
	uplands underlain by a wide variety of rocks	,	very infrequent flood potential	hazard				
2 - 7%	common to the county	В	Bearing Capacity: moderate					
			Shrink-swell Potential: low					
95B	SEE MAP UNIT 97B							
96C3	SEE MAP UNIT 97B							
97B	Very deep, well drained, dark red clayey soils	Moderate	GOOD	MARGINAL	PRIME	MODERATELY	IIe	
	on gently sloping high river terrace positions;				CROPLAND	LOW		
Goresville loam	developed in old alluvium washed from	0.28, 0.24		percs slowly				
2 70/	uplands underlain by a wide variety of rocks	-	Bearing Capacity: moderate					
2 - 7%	common to the county	В	Shrink-swell Potential: moderate					
97C2	SEE MAP UNIT 97B							
,,02	VALUE VIIII //D							

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

			USE POTENTIAL AND PRO	OBLEMS FOR	S	ELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
000	CEP MAD VINIT 04D						
98B 110A**	SEE MAP UNIT 93B  Very deep, poorly drained, gray and yellowish	C1: -1-4	VERY POOR	NOT SUITED	SECONDARY	MODERATE	
	brown loamy soils with high water tables in	Slight			PASTURE PASTURE	MODERATE	
Mongle Variant silt loam	concave landscapes, along small drainageways and on alluvial fans; developed in recent	0.43, 0.43	may be within l00-year floodplain; prolonged high water table; overland	high water table			
0 - 3%	colluvium/alluvium washed from basic and acidic rocks; HYDRIC SOIL	D	flow-significant destructive potential during flooding events Bearing Capacity: low Shrink-swell Potential: high				
116B**	Very deep, moderately well to well drained, yellowish-brown to reddish-brown silty soils	Moderate	POOR	NOT SUITED	SECONDARY PASTURE	HIGH	
Meadowville silt loam; very stony	with intermittent high water tables in concave uplands and along small drainageways; 0.1 –	0.37, 0.32	low bearing capacity when wet; intermittent high water table;	landscape position			
2 - 7%	3% stones and cobbles cover the soil surface; developed in recent colluvium and local wash from acid rock materials; may have HYDRIC soil inclusions	В	receives runoff from higher areas  Bearing Capacity: moderate  Shrink-swell Potential: low				
116C**	Very deep, moderately well to well drained, yellowish-brown to reddish-brown silty soils	High	POOR	NOT SUITED	SECONDARY PASTURE	HIGH	
Meadowville silt	with intermittent high water tables in concave	0.37, 0.32	low bearing capacity when wet;	landscape position			
loam; very stony	uplands and along small drainageways; 0.1 – 3% stones and cobbles cover the soil surface;	В	intermittent high water table; receives runoff from higher areas				
7 - 15%	developed in recent colluvium and local wash from acid rock materials; may have HYDRIC soil inclusions	D	Bearing Capacity: moderate Shrink-swell Potential: low				
117B**	Very deep, well drained, brown loamy soils in concave swales and along small drainageways	Moderate	POOR	NOT SUITED	SECONDARY PASTURE	HIGH	
Middleburg loam; very stony	; $0.1-3\%$ stones and cobbles cover the soil surface; developed in recent colluvium from	0.37, 0.28	low bearing capacity when wet; receives runoff from higher areas	landscape position			
2 - 7%	mixed basic and acidic rock	В	Bearing Capacity: moderate Shrink-swell Potential: low				
117C**	Very deep, well drained, brown loamy soils in concave swales and along small drainageways;	Moderate	POOR	NOT SUITED	SECONDARY PASTURE	HIGH	
Middleburg loam;	0.1 - 3% stones and cobbles cover the soil	0.37, 0.28	low bearing capacity when wet;	landscape position			
very stony 7 - 15%	surface; developed in recent colluvium from mixed basic and acidic rock	В	receives runoff from higher areas  Bearing Capacity: moderate  Shrink-swell Potential: low				
120C	SEE MAP UNIT 20C						
120C 120D	SEE MAP UNIT 20D						

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		EDOGION HAZADD	USE POTENTIAL AND PRO	OBLEMS FOR		SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
121B**	Deep (Pigeonroost) and very deep	Moderate	FAIR	MARGINAL	SECONDARY	MODERATE	
1210	(Edneytown), well drained, yellowish-brown	Moderate	TAIK	WAROINAL	PASTURE	WODEKATE	
Pigeonroost -	loamy soils on summits and gently sloping	0.24, 0.17	shallow to rock; stoniness	shallow to rock	111010112		
Edneytown	backslopes of the Blue Ridge; rock outcrops	,	Bearing Capacity: moderate				
complex, very stony	cover 0.01-0.1% and loose stones cover 0.1-	В	Shrink-swell Potential: low				
	3% of the surface; developed in residuum from						
2 - 7%	granite and granite gneiss						
121C	Deep (Pigeonroost) and very deep	Moderate	FAIR	MARGINAL	SECONDARY	MODERATE	VIIs
	(Edneytown), well drained, yellowish-brown				PASTURE		
Pigeonroost –	loamy soils on undulating summits and	0.24, 0.17	shallow to rock; stoniness	shallow to rock			
Edneytown	strongly sloping backslopes of the Blue Ridge;	D	Bearing Capacity: moderate				
complex, very stony	rock outcrops cover $0.01 - 0.1\%$ and loose stones cover $0.1 - 3\%$ of the surface;	В	Shrink-swell Potential: low				
7 - 15%	developed in residuum from granite and						
7 - 13/0	granite gneiss						
121D	Deep (Pigeonroost) and very deep	High	POOR	MARGINAL	SECONDARY	MODERATE	VIIs
1210	(Edneytown), well drained, yellowish-brown	111611	rook	W. HOH VIE	PASTURE	MODERATIE	V 115
Pigeonroost -	loamy soils on moderately steep backslopes of	0.24, 0.17	shallow to rock; steep slopes	steep slopes			
Edneytown	the Blue Ridge; rock outcrops cover 0.01–	•	Bearing Capacity: moderate	shallow to rock			
complex, very stony	0.1% and loose stones cover 0.1-3% of the	В	Shrink-swell Potential: low				
	surface; developed in residuum from granite						
15 - 25%	and granite gneiss						
121E	Deep, well drained, yellowish-brown loamy	Very high	VERY POOR	NOT SUITED	NOT SUITED	MODERATE	VIIe
D' 1	soils on steep backslopes of the Blue Ridge;	0.24 0.17					
Pigeonroost loam,	rock outcrops cover 0.01–0.1% and loose	0.24, 0.17	shallow to rock; very steep slopes	very steep slopes			
very stony	stones cover 0.1 - 3% of the surface; developed in residuum from granite and	В	Bearing Capacity: moderate Shrink-swell Potential: low	shallow to rock			
25 - 45%	granite gneiss	Б	Sifflik-swell rotellial. low				
123B	SEE MAP UNIT 23B						
123C**	SEE MAP UNIT 23C						
125B**	Moderately deep, excessively drained light	Moderate	POOR	POOR	SECONDARY	VERY LOW	
	yellowish-brown loamy soils on gently sloping				PASTURE		
Hazel very stony	summits and backslopes; loose stones cover	0.24, 0.24	shallow to rock; stoniness; rock-	shallow to rock			
loam; rocky	0.1-5% and rock outcrop $0.1-3%$ of the		outcrop				
-	surface; developed in residuum from meta-	В	Bearing Capacity: moderate				
2 - 7%	arkosic sandstone		Shrink-swell Potential: low				
125C	Moderately deep, excessively drained light	Moderate	POOR	POOR	SECONDARY	VERY LOW	IIIe
YY 1 .	yellowish-brown loamy soils on undulating	0.24.024		1 11	PASTURE		
Hazel very stony	summits and strongly sloping backslopes;	0.24, 0.24	shallow to rock; stoniness; rock-	shallow to rock			
loam; rocky	loose stones cover 0.1-5% and rock outcrop	D	outcrop  Rearing Connective moderate				
7 - 15%	0.1 – 3% of the surface; developed in residuum from meta-arkosic sandstone	В	Bearing Capacity: moderate Shrink-swell Potential: low				
/ - 13/0	HOIII IIICta-alkusic saliustulic		Sii iiik-sweii rotentiai: 10W				

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		EDOGION HAZARR	USE POTENTIAL AND PRO	OBLEMS FOR	SELECTED USES		
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
125D	Moderately deep, excessively drained light	High	POOR	POOR	SECONDARY PASTURE	VERY LOW	IVe
Hazel very stony	yellowish-brown loamy soils on narrow summits and moderately steep backslopes;	0.24, 0.24	shallow to rock; stoniness; rock-	shallow to rock; steep	PASTURE		
loam; rocky	loose stones cover 0.1-5% and rock outcrop	0.2 1, 0.2 1	outcrop; steep slopes	slopes			
15 - 25%	0.1 – 2% of the surface; developed in residuum from meta-arkosic sandstone	В	Bearing Capacity: moderate Shrink-swell Potential: low				
125E	Moderately deep, excessively drained light yellowish-brown loamy soils on steep	Very high	POOR	NOT SUITED	NOT SUITED	VERY LOW	VIIe
Hazel very stony	backslopes; loose stones cover 0.1-5% and	0.24, 0.24	shallow to rock; stoniness; rock-	shallow to rock; very			
loam; rocky	rock outcrop $0.1 - 2\%$ of the surface;	_	outcrop; very steep slopes	steep slopes			
25 - 45%	developed in residuum from meta-arkosic sandstone	В	Bearing Capacity: moderate Shrink-swell Potential: low				
128C	SEE MAP UNIT 20C						
128D	SEE MAP UNIT 20D						
130B**	Very deep, well drained, yellowish-brown loamy soils on summits and gently sloping	Moderate	GOOD	GOOD	SECONDARY CROPLAND	MODERATE	
Edneytown loam;	backslopes; loose stones cover 0.01-1% of the	0.24, 0.17					
stony	soil surface; developed in residuum from, augen gneiss, granite gneiss and granite	В	Bearing Capacity: moderate Shrink-swell Potential: low				
2 - 7% 130C**	Very deep, well drained, yellowish-brown loamy soils on sloping summits and	Moderate	GOOD	GOOD	SECONDARY CROPLAND	MODERATE	
Edneytown loam;	backslopes; loose stones cover 0.01-1% of the	0.24, 0.17			CHOT ELLIS		
stony	soil surface; developed in residuum from, augen gneiss, granite gneiss and granite	В	Bearing Capacity: moderate Shrink-swell Potential: low				
7 - 15%							
131C	SEE MAP UNIT 23C	*** 1	TAR	N/ D CD / I	DDM CE	MODER LEET TO	
131D**	Very deep, well drained, strong brown, fine- silty (Purcellville) and moderately deep, well	High	FAIR	MARGINAL	PRIME PASTURE	MODERATELY LOW	
Purcellville –	drained, strong brown, coarse-loamy	0,.32, 0.28	steep slopes; shallow to rock	steep slopes			
Tankerville complex	(Tankerville) soils on strongly sloping backslopes; developed in residuum from	В	Bearing Capacity: moderate Shrink-swell Potential: low	shallow to rock			
15 – 25% 134B**	granite, granite gneiss and granitic schist	Madanata	COOD	COOD	DDIME	LOW	
	Very deep, well drained, brownish-yellow loamy soils on srtongly sloping backslopes;	Moderate	GOOD	GOOD	PRIME CROPLAND	LOW	
Buffstat Variant	developed in residuum from phyllite and meta-	0.43, 0.28	Paguing Canasitas				
loam	monzanite granite	В	Bearing Capacity: moderate Shrink-swell Potential: low				
3 - 8%							

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			222		~~~		
134C**	Very deep, well drained, brownish-yellow loamy soils on srtongly sloping backslopes;	Moderate	GOOD	GOOD	SECONDARY CROPLAND	LOW	
Buffstat Variant	developed in residuum from phyllite and meta-	0.43, 0.28					
loam	monzanite granite	В	Bearing Capacity: moderate Shrink-swell Potential: low				
8 -15%							
134D**	Very deep, well drained, brownish-yellow loamy soils on srtongly sloping backslopes;	High	FAIR	MARGINAL	PRIME PASTURE	LOW	
Buffstat Variant	developed in residuum from phyllite and meta-	0.43, 0.28	steep slopes		11101010		
loam	monzanite granite	В	Bearing Capacity: moderate Shrink-swell Potential: low	Steep slopes			
15 -25%		2	Shrink Swell I dentall 10W				
140B**	Moderately deep, well drained, strong brown silty soils on gently sloping summits and	Moderate	FAIR	POOR	SECONDARY CROPLAND	MODERATE	
Pignut silt loam	backslopes in highly dissected landscapes; developed in residuum from greenstone	0.32, 0.17	shallow to rock <b>Bearing Capacity:</b> moderate	shallow to rock	CROTEMIND		
2 - 7%	developed in residudin from greenstone	В	Shrink-swell Potential: low				
140C**	Moderately deep, well drained, strong brown	Moderate	FAIR	POOR	SECONDARY	MODERATE	
	silty soils with few rock outcrops, stones and				CROPLAND		
Pignut silt loam	boulders on convex sideslopes in highly	0.32, 0.17	shallow to rock	shallow to rock			
7 - 15%	dissected landscapes; developed in residuum from greenstone	В	Bearing Capacity: moderate Shrink-swell Potential: low				
140D**	Moderately deep, well drained, strong brown	High	FAIR	POOR	PRIME	MODERATE	
Pignut silt loam	silty soils on moderately steep backslopes in highly dissected landscapes; developed in	0.32, 0.17	shallow to rock; steep slopes	shallow to rock	PASTURE		
righti shi loani	residuum from greenstone	0.32, 0.17	Bearing Capacity: moderate	Shallow to fock			
15 - 25%		В	Shrink-swell Potential: low				
140E**	Moderately deep, well drained, strong brown	Very High	POOR	NOT SUITED	NOT SUITED	MODERATELY LOW	
Pignut silt loam	silty soils on steep backslopes in highly dissected landscapes; developed in residuum	0.32, 0.17	shallow to rock; very steep slopes	shallow to rock		LUW	
25 - 50%	from greenstone	В	Bearing Capacity: moderate Shrink-swell Potential: low	very steep slopes			
141D**	Moderately deep, well drained, strong brown silty soils (Pignut) and very deep, well drained,	High	POOR	POOR	SECONDARY PASTURE	MODERATE	
Pignut – Alanthus	yellowish-red silty soils (Alanthus) on	0.28, 0.17		shallow to rock	PASTURE		
complex, very stony	moderately steep backslopes; surface cover is	0.20, 0.17	shallow to rock; stoniness	Shullow to lock			
15 - 25 %	represented by $.01 - 3\%$ stones and cobbles, and $0 - 0.1\%$ rock outcrop; developed in	C	Bearing Capacity: moderate Shrink-swell Potential: low				
	residuum from greenstone						

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		*	USE POTENTIAL AND PRO	OBLEMS FOR	S	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
141E**	Moderately deep, well drained, strong brown	Very high	POOR	NOT SUITED	NOT SUITED	MODERATELY	
	silty soils on steep backslopes; surface cover					LOW	
Pignut silt loam;	is represented by $.01 - 3\%$ stones and cobbles,	0.28, 0.17	shallow to rock; stoniness; very steep	shallow to rock			
very stony	and $0 - 0.1\%$ rock outcrop; developed in	C	slopes	very steep slopes			
25 - 45 %	residuum from greenstone	С	Bearing Capacity: moderate Shrink-swell Potential: low				
141F**	Moderately deep, well drained, strong brown silty soils on very steep backslopes; surface	Very high	VERY POOR	NOT SUITED	NOT SUITED	LOW	
Pignut silt loam;	cover is represented by .01 – 3% stones and	0.28, 0.17	shallow to rock; stoniness; very steep	shallow to rock			
very stony	cobbles, and $0 - 0.1\%$ rock outcrop; developed	,	slopes	very steep slopes			
45%+	in residuum from greenstone	С	Bearing Capacity: moderate Shrink-swell Potential: low				
148B**	Shallow, well drained, olive brown loamy skeletal soils (Catoctin-shallow) and deep,	Moderate	POOR	NOT SUITED	PRIME PASTURE	LOW	
Catoctin (shallow	moderately well drained, light yellowish	0.32, 0.17	shallow to rock; shrink-swell clay in	shallow to rock			
phase) –	brown, shrink-swell clay soils (Fletcherville)		subsoil	shrink-swell clay in			
Fletcherville	on convex/concave sideslopes and summits;	D	Bearing Capacity: low	subsoil			
complex	developed in residuum from greenstone schist		Shrink-swell Potential: high				
2 - 7%							
148C**	Shallow, well drained, olive brown, loamy skeletal soils (Catoctin-shallow) and deep,	Moderate	POOR	NOT SUITED	PRIME PASTURE	LOW	
Catoctin (shallow	moderately well drained, light yellowish	0.32, 0.17	shallow to rock; shrink-swell clay in	shallow to rock			
phase) –	brown, shrink-swell clay soils (Fletcherville)	_	subsoil	shrink-swell clay in			
Fletcherville	on convex/concave sideslopes; developed in	D	Bearing Capacity: low	subsoil			
complex	residuum from greenstone schist		Shrink-swell Potential: high				
7 - 15%							
160B**	Moderately deep, well drained, grayish-brown silty soils on gently sloping sideslopes;	Moderate	FAIR	POOR	SECONDARY CROPLAND	LOW	
Ott silt loam	developed in residuum from bluish-gray	0.32, 0.10	shallow to rock	shallow to rock			
2 00/	thermally altered Triassic shale	C	Bearing Capacity: low				
3 - 8%		С	Shrink-swell Potential: low				
163A**	Deep, moderately well drained, yellowish- brown claypan soils with intermittent high	Slight	VERY POOR	NOT SUITED	SECONDARY CROPLAND	MODERATE	
Remington silt loam	water tables on broad upland flats and concave areas; developed in old alluvial capping	0.37, 0.28	high shrink-swell clay layers in the subsoil; intermittent high water	high water table			
0 - 3%	underlain by residuum from thermally-altered	C	table; low relief				
	Triassic shales and granulite; may have		Bearing Capacity: low				
	HYDRIC soil inclusions		Shrink-swell Potential: very high				

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		ED COVOL IVI ZADD	USE POTENTIAL AND PRO	OBLEMS FOR	S	ELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
163B**	Deep, moderately well drained, yellowish-	Moderate	VERY POOR	NOT SUITED	SECONDARY	MODERATE	
	brown claypan soils with intermittent high				CROPLAND		
Remington silt loam	water tables on gently sloping backslopes; developed in old alluvial capping underlain by	0.37, 0.28	high shrink-swell clay layers in the subsoil; intermittent high water	high water table			
3 - 8%	residuum from thermally-altered Triassic	С	table; low relief				
3 070	shales and granulite; may have HYDRIC soil	C	Bearing Capacity: low				
	inclusions		Shrink-swell Potential: very high				
164B**	Moderately deep, well drained, yellowish-red	Moderate	VERY POOR	NOT SUITED	NOT SUITED	LOW	VIIs
	loamy soils with more than 35% rock						
Oakhill-Rock	fragments in the soil mass and $10 - 25\%$ rock	0.24, 0.28	rock outcrops; stones and boulders	rock outcrops			
Outcrop complex	outcrops on gently sloping the strongly sloping	~	Bearing Capacity: moderate	shallow to rock			
2 00/	backslopes; soil surface is covered by 0.01 –	С	Shrink-swell Potential: low	stone content			
3 - 8%	0.2% stones and cobbles; developed in residuum from basalt						
164C	Moderately deep, well drained, yellowish-red	Moderate	VERY POOR	NOT SUITED	NOT SUITED	LOW	VIIs
104C	loamy soils with more than 35% rock	Moderate	VERT FOOR	NOT SUITED	NOT SUITED	LOW	V 115
Oakhill-Rock	fragments in the soil mass and 10 – 25% rock	0.24, 0.28	rock outcrops; stones and boulders	rock outcrops			
Outcrop complex	outcrops on gently sloping the strongly sloping	0.2 ., 0.20	Bearing Capacity: moderate	shallow to rock			
· F · · · F ·	backslopes; soil surface is covered by 0.01 –	С	Shrink-swell Potential: low	stone content			
8 - 15%	0.2% stones and cobbles; developed in						
	residuum from basalt						
164D	Moderately deep, well drained, yellowish-red loamy soils with more than 35% rock	High	VERY POOR	NOT SUITED	NOT SUITED	LOW	
Oakhill-Rock	fragments in the soil mass and $10 - 25\%$ rock	0.24, 0.28	rock outcrops; steep slopes	steep slopes			
Outcrop complex	outcrops on moderately steep and steep		Bearing Capacity: moderate	rock outcrops			
	backslopes; soil surface is covered by 0.01 –	C	Shrink-swell Potential: low				
15 - 25%	0.2% stones and cobbles; developed in						
1(502	residuum from basalt						
165C3 167A**	SEE MAP UNIT 65C  Very deep, well drained, dark brown clayey	Slight	POOR	POOR	PRIME	MODERATE	IIe
10/A""	soils on nearly level summits; developed in	Siignt	POOR	POOR	CROPLAND	MODERATE	He
Haymarket silt loam	residuum from Triassic diabase and basalt	0.32, 0.10	high shrink-swell clay in the subsoil	percs slowly	CKULLAND		
Traymarket sitt loam	residudii iroin Triassie diabase and basait	0.52, 0.10	Bearing Capacity: low	peres slowly			
0 - 3%		D	Shrink-swell Potential: very high				
0 370		_	Similar Given 1 Overleans very mgm				
167B	Very deep, well drained, dark brown clayey	Moderate	POOR	POOR	PRIME	MODERATE	IIe
	soils on gently sloping summits and				CROPLAND		
Haymarket silt loam	backslopes; developed in residuum from	0.32, 0.10	high shrink-swell clay in the subsoil	percs slowly			
	Triassic diabase and basalt		Bearing Capacity: low				
3 - 8%		D	Shrink-swell Potential: very high				

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		ED COLON III G I D D	USE POTENTIAL AND PR	OBLEMS FOR	S	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
167C	Very deep, well drained, red clayey soils and/or dark brown clayey soils on strongly	Moderate	POOR	MARGINAL	SECONDARY CROPLAND	MODERATE	
Montalto and Haymarket soils	sloping backslopes; developed in residuum from Triassic diabase and basalt This map	0.32, 0.10	high shrink-swell clay in the subsoil <b>Bearing Capacity:</b> low	percs slowly			
8 - 15%	unit will predominantly contain Montalto and/or Haymarket soils	D	Shrink-swell Potential: very high				
169A	SEE MAP UNIT 69A						
170A**	Deep, moderately well drained, strong brown loamy over clayey soils on nearly level	Slight	POOR	NOT SUITED	SECONDARY CROPLAND	MODERATE	
Mt. Lucas Variant loam	summits and footslopes; developed in colluvium over residuum from basalt and	0.37, 0.28	intermittent high water table; shrink- swell clay in lower subsoil	high water table	CROTEAND		
0 - 3%	diabase	С	Bearing Capacity: low Shrink-swell Potential: high				
170B**	Deep, moderately well drained, strong brown loamy over clayey soils on nearly level	Moderate	POOR	NOT SUITED	SECONDARY CROPLAND	MODERATE	
Mt. Lucas Variant loam	summits and footslopes; developed in colluvium over residuum from basalt and diabase	0.37, 0.28 C	intermittent high water table; shrink- swell clay in lower subsoil Bearing Capacity: low	high water table			
3 - 8%			Shrink-swell Potential: high				
171B**	Deep, well drained, dark reddish-brown silty soils on broad gently sloping ridges; developed	Moderate	FAIR	MARGINAL	SECONDARY CROPLAND	MODERATE	
Panorama Variant very gravelly silt	in residuum from red Triassic shale and sandstone	0.37, 0.32	low bearing capacity when wet (high silt content), very gravelly surface	percs slowly			
loam		В	Bearing Capacity: low Shrink-swell Potential: low				
2 – 7% 171C**	Deep, well drained, dark reddish-brown silty soils on broad gently sloping ridges; developed	Moderate	FAIR	MARGINAL	SECONDARY CROPLAND	MODERATE	
Panorama Variant very gravelly silt	in residuum from red Triassic shale and sandstone	0.37, 0.32	low bearing capacity when wet (high silt content); very gravelly surface	percs slowly	CHOLEMAD		
loam		В	Bearing Capacity: low Shrink-swell Potential: low				
7 - 15%		~	W 1 2 2 2				
173A**	Moderately deep, moderately well drained, reddish-brown silty soils on ridgetops and	Slight	FAIR	POOR	SECONDARY CROPLAND	MODERATELY LOW	
Penn gravelly silt loam (WET PHASE)	upper sideslopes, developed in residuum from Triassic siltstone, shale and conglomerate	0.37, 0.24 C	intermittent high water table; shallow to rock <b>Bearing Capacity:</b> low	intermittent high water table shallow to rock			
0 - 3%			Shrink-swell Potential: low	SHAHOW TO TOCK			

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

			USE POTENTIAL AND PR	OBLEMS FOR	S	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
173B**	Moderately deep, moderately well drained, reddish-brown silty soils on summits and	Moderate	FAIR	POOR	SECONDARY CROPLAND	MODERATEY LOW	
Penn gravelly silt loam (WET	gently sloping backslopes, developed in residuum from Triassic siltstone and shale	0.37, 0.24	intermittent high water table; shallow to rock	intermittent high water table			
PHASE) 3 - 8%		С	Bearing Capacity: low Shrink-swell Potential: low	shallow to rock			
173C**	Moderately deep, moderately well drained, reddish-brown silty soils on summits and	Moderate	FAIR	POOR	SECONDARY CROPLAND	MODERATEY LOW	
Penn gravelly silt loam (WET	gently sloping backslopes, developed in residuum from Triassic siltstone and shale	0.37, 0.24	intermittent high water table; shallow to rock	intermittent high water table			
<b>PHASE</b> ) 8 - 15%		С	Bearing Capacity: low Shrink-swell Potential: low	shallow to rock			
174B**	Moderately deep, moderately well drained, yellowish-brown silty soils with intermittent	Moderate	FAIR	POOR	PRIME PASTURE	MODERATELY LOW	
Ashburn very gravelly silt loam	high water tables on level to gently sloping landscapes; developed from thin fluvial cappings over Triassic siltstone	0.37, 0.24 C	intermittent high water table; low bearing capacity when wet; very gravelly surface	shallow to rock intermittent high water table			
3 - 8%			Bearing Capacity: low Shrink-swell Potential: moderate				
175B**	Very deep, well drained, red to dark red clayey soils on gently sloping ridgetops; developed in	Moderate	FAIR	MARGINAL	SECONDARY CROPLAND	MODERATE	
Casanova very gravelly silt loam	residuum from Triassic siltstone and conglomerate	0.37, 0.28 B	very gravelly surface  Bearing Capacity: moderate  Shrink-swell Potential: moderate	percs slowly			
2 - 7%		Б	Shiring-swell i otential. Inoderate				
176B**	Moderately deep, moderately well drained, strong brown to reddish-brown loamy soils on	Moderate	FAIR	POOR	PRIME PASTURE	MODERATELY LOW	
Oatlands very gravelly silt loam;	rolling uplands; developed in residuum from Triassic siltstone and conglomerate	0.32, 0.15	intermittent high water table; shallow to rock; very gravelly	intermittent high water table			
(WET PHASE)	-	С	surfaces Bearing Capacity: low	shallow to rock			
3 - 8%			Shrink-swell Potential: low				

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		-	USE POTENTIAL AND PRO	OBLEMS FOR	S	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
178A**	Moderately deep, somewhat poorly drained, yellowish-brown mottled with gray loamy	Slight	VERY POOR	NOT SUITED	PRIME PASTURE	MODERATE	
Dulles Variant silt loam	soils with intermittent high water tables in concave landscapes (swales) and	0.37, 0.32	may be within 100-year floodplain; high water table; low relief; low	high water table	T. IOT OTEL		
0 - 3%	drainageways; developed in local alluvium washed from Triassic uplands; may have HYDRIC soil inclusions	D	bearing capacity when wet due to high silt content Bearing Capacity: low Shrink-swell Potential: low				
178B**	Moderately deep, somewhat poorly drained, yellowish-brown mottled with gray loamy	Moderate	VERY POOR	NOT SUITED	PRIME PASTURE	MODERATE	
Dulles Variant silt loam	soils with intermittent high water table water tables in concave landscapes (swales) and	0.37, 0.32	may be within 100-year floodplain; high water table; low relief; low	high water table			
3 - 8%	drainageways; developed in local alluvium washed from Triassic uplands; may have HYDRIC soil inclusions	D	bearing capacity when wet due to high silt content Bearing Capacity: low Shrink-swell Potential: low				
179A**	Moderately deep, poorly drained, gray loamy soils with high water tables in concave	Slight	VERY POOR	NOT SUITED	SECONDARY PASTURE	MODERATELY LOW	
Albano Variant silt loam	landscapes (swales) and drainageways; developed in local alluvium washed from Triassic uplands; HYDRIC soil	0.37, 0.32 D	may be within 100-year floodplain; high water table; low relief; low bearing capacity when wet due to	high water table			
0 - 3%	Thusse aplanes, IT Date son	D	high silt content in surface and shrink-swell clay in the subsoil Bearing Capacity: low Shrink-swell Potential: low				
181B**	Very deep, moderately well drained, yellowish-brown loamy soils on footslopes and	Moderate	FAIR	POOR	SECONDARY PASTURE	MODERATELY LOW	
Brumbaugh loam; very stony	toeslopes of mountains and in broad gently sloping interfluves; semi-rounded stones make	0.28, 0.20	intermittent high water table; stoniness	high water table			
2 - 7%	up 5-50% of the soil surface; 0.1–3% stones cover the soil surface; developed in old mountain colluvium from mixed acidic and basic rocks	С	Bearing Capacity: moderate Shrink-swell Potential: low				
183B**	Very deep, well drained, reddish-brown clayey soils on footslopes, broad summits and gently	Moderate	GOOD	MARGINAL	PRIME CROPLAND	MODERATE	
Braddock gravelly loam	sloping backslopes; rounded stones make up 0 - 50% of the soil mass; developed in old colluvium from mixed acidic and basic rocks	0.28, 0.28 B	Bearing Capacity: moderate Shrink-swell Potential: moderate	percs slowly			
2 - 7%							

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

	y son Characteristics and eser stemati	1 0	USE POTENTIAL AND PRO	OBLEMS FOR	S	ELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
183C**	Very deep, well drained reddish-brown clayey soils on footslopes, broad summits and	Moderate	GOOD	MARGINAL	SECONDARY CROPLAND	MODERATE	
Braddock gravelly loam	strongly sloping backslopes; rounded stones make up 0 - 50% of the soil mass; developed in old colluvium from mixed acidic and basic	0.28, 0.28 B	Bearing Capacity: moderate	percs slowly	CHOT Z.II.IZ		
7 - 15%	rocks	Ь	Shrink-swell Potential: moderate				
183D**	Very deep, well drained reddish-brown clayey soils on steep backslopes; rounded stones	High	FAIR	MARGINAL	PRIME PASTURE	MODERATE	
Braddock gravelly loam	make up 0 - 50% of the soil mass; developed in old colluvium from mixed acidic and basic	0.28, 0.28	steep slopes	percs slowly Steep slopes			
15 - 25%	rocks	В	Bearing Capacity: moderate Shrink-swell Potential: moderate				
187B**	Very deep, well drained, dark yellowish-brown soils on footslopes and benches; semi-rounded	Moderate	POOR	MARGINAL	SECONDARY PASTURE	MODERATE	
Tate loam; very stony	stones and cobbles make up 5-50% of the soil; 0.1-3% stones cover the soil surface;	0.28, 0.20	subject to overland flow; significant destructive potential during storm	landscape position			
2- 7%	developed in recent colluvium from granitic rocks	С	events; stoniness  Bearing Capacity: moderate  Shrink-swell Potential: low				
187C**	Very deep, well drained, dark yellowish-brown soils on footslopes and benches; semi-rounded	Moderate	POOR	MARGINAL	SECONDARY PASTURE	MODERATE	
Tate loam; very stony	stones and cobbles make up 5-50% of the soil; 0.1-3% stones cover the soil surface; developed in recent colluvium from granitic	0.28, 0.20 C	subject to overland flow; significant destructive potential during storm events; stoniness	landscape position			
7- 15%	rocks		Bearing Capacity: moderate Shrink-swell Potential: low				
187D**	Very deep, well drained, dark yellowish-brown soils on steep footslopes and backslopes; semi-	High	POOR	MARGINAL	SECONDARY PASTURE	MODERATE	
Tate loam; very stony	rounded stones and cobbles make up 5-50% of the soil; 0.1-3% stones cover the soil surface;	0.28, 0.20	subject to overland flow; significant destructive potential during storm	landscape position Steep slope			
15- 25%	developed in recent colluvium from granitic rocks	С	events; stoniness; steep slope Bearing Capacity: moderate Shrink-swell Potential: low				
189B**	Very deep, well drained, strong brown loamy soils on gently sloping backslopes and	Moderate	GOOD	GOOD	SECONDARY CROPLAND	LOW	
Weverton gravelly loam	benches; gravels and flagstones range from 15 – 70% of the soil mass; formed in colluvium from interbedded quartzite, quartz muscovite	0.15, 0.10 B	Bearing Capacity: moderate Shrink-swell Potential: low		CROT LAW		
2 - 7%	schist and phyllite						

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

			USE POTENTIAL AND PR	OBLEMS FOR	S	ELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
189C**	Very deep, well drained strong brown loamy	Moderate	GOOD	GOOD	SECONDARY	LOW	
	soils on sloping backslopes and benches;				CROPLAND		
Weverton gravelly	gravels and flagstones range from 15 – 70% of	0.15, 0.10	Bearing Capacity: moderate				
loam	the soil mass; formed in colluvium from interbedded quartzite, quartz muscovite schist	В	Shrink-swell Potential: low				
7 - 15%	and phyllite	Б					
189D**	Very deep, well drained strong brown loamy	High	FAIR	MARGINAL	PRIME	LOW	
	soils on strongly sloping backslopes and	Č			PASTURE		
Weverton gravelly	benches; gravels and flagstones range from 15	0.15, 0.10	Steep slopes	steep slopes			
loam	- 70% of the soil mass; formed in colluvium from interbedded quartzite, quartz muscovite	В	Bearing Capacity: moderate				
15 - 25%	schist and phyllite	Б	Shrink-swell Potential: low				
200**	Disturbed areas of cutting and/ or filling	TT		DIE			
		H	IGHLY VARIA	BLE			
Cut and/or Fill							
220B**	Moderately deep, well drained, strong brown	Moderate	FAIR	POOR	SECONDARY	LOW	
2200	coarse-loamy soils on summits and gently	Wiodelate	771110	rook	CROPLAND	2011	
Tankerville loam	sloping backslopes; developed in residuum	0.28, 0.24	shallow to rock	shallow to rock			
	from granite, schist and gneiss	_	Bearing Capacity: moderate				
2 - 7%		В	Shrink-swell Potential: low				
220C**	Moderately deep, well drained, strong brown	High	FAIR	POOR	SECONDARY	LOW	
2200	coarse-loamy soils on strongly sloping	8			CROPLAND		
Tankerville loam	summits and backslopes; developed in	0.28, 0.24	shallow to rock	shallow to rock			
	residuum from granite, schist and gneiss	_	Bearing Capacity: moderate				
7 - 15%		В	Shrink-swell Potential: low				
220D**	Moderately deep, well drained, strong brown	High	POOR	POOR	PRIME	LOW	
2200	coarse-loamy soils on moderately steep	High	1001	10010	PASTURE	LOW	
Tankerville loam	backslopes; developed in residuum from	0.28, 0.24	shallow to rock; steep slopes	shallow to rock;			
	granite, schist and gneiss		Bearing Capacity: moderate	steep slopes			
15 - 25%		В	Shrink-swell Potential: low				
220E**	Moderately deep, well drained, strong brown	Very high	VERY POOR	NOT SUITED	SECONDARY	LOW	
220E	coarse-loamy soils on steep backslopes;	v ci y iligii	VERT TOOK	NOI SUITED	PASTURE	LOW	
Tankerville loam	developed in residuum from granite, schist and	0.28, 0.24	shallow to rock; very steep slopes	shallow to rock			
	gneiss		Bearing Capacity: moderate	very steep slopes			
25 - 45%		В	Shrink-swell Potential: low				

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

			USE POTENTIAL AND PRO	OBLEMS FOR	S	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
220F**	Moderately deep, well drained, strong brown coarse-loamy soils on steep backslopes;	Very high	VERY POOR	NOT SUITED	NOT SUITED	LOW	
Tankerville loam	developed in residuum from granite, schist and gneiss	0.28, 0.24	shallow to rock; very steep slopes  Bearing Capacity: moderate	shallow to rock very steep slopes			
45 - 65%		В	Shrink-swell Potential: low				
221D	Deep, well drained, dark yellowish-brown loamy soils on moderately steep backslopes of	High	VERY POOR	NOT SUITED	NOT SUITED	LOW	
Pigeonroost – Rock- Outcrop complex	the Blue Ridge; rock outcrops cover $5 - 15\%$ and loose stones cover $10-40\%$ of the surface;	0.24, 0.17	steep slopes; rock outcrops  Bearing Capacity: moderate	steep slopes rock outcrops			
15 - 25%	developed in residuum from granite and granite gneiss	C	Shrink-swell Potential: low	Tooli outoropo			
221E	Deep, well drained, dark yellowish-brown loamy soils on steep backslopes of the Blue	Very high	VERY POOR	NOT SUITED	NOT SUITED	LOW	VIIs
Pigeonroost - Rock-	Ridge; rock outcrops cover 5 – 15% and loose	0.24, 0.17	very steep slopes; rock outcrops	very steep slopes			
Outcrop complex	stones cover 10-40% of the surface;	ŕ	Bearing Capacity: moderate	rock outcrops			
25 - 45%	developed in residuum from granite and granite gneiss	С	Shrink-swell Potential: low				
225D	Moderately deep, excessively drained, yellowish-brown loamy soils and 10 – 25%	High	VERY POOR	NOT SUITED	NOT SUITED	VERY LOW	VIIs
Hazel-Rock Outcrop	rock outcrops on moderately steep backslopes;	0.20, 0.20		rock outcrops			
complex	loose stones and cobbles cover 1-45% of the surface; developed in residuum from arkosic sandstone	C	rock outcrops; steep slopes  Bearing Capacity: moderate  Shrink-swell Potential: low	steep slopes			
15 - 25%							
225E	Moderately deep, excessively drained, yellowish-brown loamy soils and 10 – 25%	Very high	VERY POOR	NOT SUITED	NOT SUITED	VERY LOW	
Hazel-Rock Outcrop complex	rock outcrops on very steep backslopes; loose stones and cobbles cover 1-45% of the surface;	0.20, 0.20	very steep slopes; rock outcrops  Bearing Capacity: moderate	very steep slopes rock outcrops			
25 - 45%	developed in residuum from arkosic sandstone	С	Shrink-swell Potential: low	1			
230B**	Very deep, well drained, yellowish-brown (Edneytown) loamy soil and moderately deep,	Moderate	FAIR	MARGINAL	PRIME CROPLAND	MODERATELY LOW	
Edneytown -	well drained dark brown (Chestnut) coarse-	0.24, 0.24	Shallow to rock	shallow to rock			
Chestnut complex	loamy soil on undulating summits in dissected landscapes; developed in residuum from	В	Bearing Capacity: moderate Shrink-swell Potential: low				
2 - 7%	coarse-textured granite and granite gneiss	_					
230C**	Very deep, well drained, yellowish-brown (Edneytown) loamy soil and moderately deep,	Moderate	FAIR	MARGINAL	SECONDARY CROPLAND	MODERATELY LOW	
Edneytown –	well drained dark brown (Chestnut) coarse-	0.24, 0.24	shallow to rock	shallow to rock			
Chestnut complex	loamy soil on summits and strongly sloping backslopes in dissected landscapes; developed	В	Bearing Capacity: moderate Shrink-swell Potential: low				
7 - 15%	in residuum from coarse-textured granite and granite gneiss		2				

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		*	USE POTENTIAL AND PRO	OBLEMS FOR	9	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
230D**	Very deep, well drained, yellowish-brown	High	FAIR	MARGINAL	PRIME	MODERATELY	
F1 /	(Edneytown) loamy soil and moderately deep,	0.24.0.24	1.11 4 1 4 1	1 11 4 1	PASTURE	LOW	
Edneytown –	well drained, dark brown (Chestnut) coarse-	0.24, 0.24	shallow to rock; steep slopes	shallow to rock			
Chestnut complex	loamy soil on moderately steep backslopes in dissected landscapes; developed in residuum	В	Bearing Capacity: moderate Shrink-swell Potential: low	steep slopes			
15 - 25%	from coarse-textured granite and granite gneiss	Б	Shrink-swell Potential: 10w				
230E**	Very deep, well drained, yellowish-brown	Very high	POOR	NOT SUITED	SECONDARY	LOW	
230E""	(Edneytown) loamy soil and moderately deep,	very mgn	FOOR	NOT SUITED	PASTURE	LOW	
Edneytown –	well drained dark brown (Chestnut) coarse-	0.24, 0.24	shallow to rock; very steep slopes	very steep slopes	TASTORE		
Chestnut complex	loamy soil on steep backslopes in dissected	0.24, 0.24	Bearing Capacity: moderate	very steep slopes			
Chestnut complex	landscapes; developed in residuum from	В	Shrink-swell Potential: low				
25 - 50%	coarse-textured granite and granite gneiss	_	Similar Swell I overleam 10 W				
240B**	Shallow, well drained, olive brown, loamy-	Moderate	POOR	NOT SUITED	PRIME	LOW	
	skeletal soils on gently sloping backslopes;				PASTURE		
Catoctin silt loam	may have a few cobbles and/or stones on the	0.32, 0.17	shallow to rock	shallow to rock			
(shallow phase)	surface; developed in residuum from		Bearing Capacity: moderate				
	greenstone	D	Shrink-swell Potential: low				
2 - 7%							
240C**	Shallow, well drained, olive brown, loamy-	Moderate	POOR	NOT SUITED	PRIME	LOW	
	skeletal soils on strongly sloping backslopes;				PASTURE		
Catoctin silt loam	may have a few cobbles and/or stones on the	0.32, 0.17	shallow to rock	shallow to rock			
(shallow phase)	surface; developed in residuum from	ъ.	Bearing Capacity: moderate				
7 - 15%	greenstone	D	Shrink-swell Potential: low				
7 - 15% 240D**	Shallow, well drained, olive brown, loamy-	TT: _1.	POOR	NOT SUITED	PRIME	LOW	
240D**	skeletal soils on moderately steep backslopes;	High	POOR	NOT SUITED	CROPLAND	LOW	
Catoctin silt loam	may have a few cobbles and/or stones on the	0.28, 0.17	shallow to rock; steep slopes	shallow to rock	CROFLAND		
(shallow phase)	surface; developed in residuum from	0.26, 0.17	Bearing Capacity: moderate	steep slopes			
(Shanow phase)	greenstone	В	Shrink-swell Potential: low	этеер эторез			
15 - 25%	8	_	Similar Swell I overleam 10 W				
241B**	Very deep, well drained, yellowish-red silty	Moderate	FAIR	MARGINAL	PRIME	MODERATELY	
	soils (Alanthus) and moderately deep, well				CROPLAND	HIGH	
Alanthus -Pignut	drained, strong brown silty soils (Pignut) on	0.28, 0.17	shallow to rock	shallow to rock			
complex	undulating summits; soil surface may contain a	,	Bearing Capacity: moderate				
•	few cobbles and/or stones; developed in	В	Shrink-swell Potential: low				
2 - 7 %	residuum from greenstone						
241C**	Very deep, well drained, yellowish-red silty	Moderate	FAIR	MARGINAL	SECONDARY	MODERATELY	
	soils (Alanthus) and moderately deep, well				CROPLAND	HIGH	
Alanthus -Pignut	drained, strong brown silty soils (Pignut) on	0.28, 0.17	shallow to rock	shallow to rock			
complex	undulating summits and gently sloping	-	Bearing Capacity: moderate				
7 150/	backslopes; soil surface may contain a few	В	Shrink-swell Potential: low				
7 - 15 %	cobbles and/or stones; developed in residuum						
	from greenstone						

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

			USE POTENTIAL AND PR	OBLEMS FOR	\$	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
241D**	Moderately deep, well drained, strong brown	High	POOR	POOR	PRIME	MODERATELY	
2410	silty soils (Pignut) and very deep, well drained,	High	FOOR	FOOR	PASTURE	LOW	
Pignut- Alanthus	yellowish-red silty soils (Alanthus) on	0.28, 0.17	shallow to rock; steep slopes	shallow to rock			
complex	moderately steep backslopes; soil surface may contain a few cobbles and/or stones; developed	В	Bearing Capacity: moderate Shrink-swell Potential: low	Steep slopes			
15 - 25 % 260E**	in residuum from greenstone Shallow, well drained, grayish-brown silty	V II: -1-	VEDV DOOD	NOT SUITED	NOT SUITED	LOW	
260E^^	soils containing more than 35% rock	Very High	VERY POOR	NOT SUITED	NOT SUITED	LOW	
Catlett gravelly silt	fragments on steep sideslopes with 0.5 to 2	0.32, 0.10	shallow to rock; very steep slopes;	shallow to rock			
loam, rocky	percent rock-outcrop; developed in residuum	ъ.	rock outcrop	very steep slopes			
25 - 65%	from bluish-gray thermally altered Triassic shale	D	Bearing Capacity: low Shrink-swell Potential: low				
23 - 03/6	Silaic		Sillink-swen rotential: 10w				
265B**	Very deep, well drained, red clayey soils with few stones and boulders on ridgetops;	Moderate	GOOD	MARGINAL	PRIME CROPLAND	MODERATE	
Montalto silty clay	developed in residuum from Triassic diabase.	0.28, 0.28		percs slowly			
loam, stony		С	Bearing Capacity: moderate Shrink-swell Potential: moderate				
3 - 8%			222				
265C**	Very deep, well drained, red clayey soils with few stones and boulders on strongly sloping	Moderate	GOOD	MARGINAL	SECONDARY CROPLAND	MODERATE	
Montalto silty clay	sideslopes; developed in residuum from	0.28, 0.28		percs slowly			
loam, stony	Triassic diabase.	~	Bearing Capacity: moderate				
8 -15%		С	Shrink-swell Potential: moderate				
8-15% 265D**	Very deep, well drained, red clayey soils with	High	FAIR	MARGINAL	PRIME	MODERATE	
2001	few stones and boulders on moderately steep	IIIgii	171110	MARGINAL	PASTURE	MODERATE	
Montalto silty clay	sideslopes; developed in residuum from	0.28, 0.28	steep slopes	percs slowly			
loam, stony	Triassic diabase.		Bearing Capacity: moderate	steep slopes			
15 250/		С	Shrink-swell Potential: moderate				
15 - 25% 269A**	Deep, poorly drained, dark gray loamy-skeletal	Cliabt	VERY POOR	NOT SUITED	SECONDARY	LOW	
269A^^	soils (containing more than 35 percent gravels	Slight	VERY POOR	NOT SUITED	PASTURE	LOW	
Meetze very	and cobbles in the subsoil) in drainageways;	0.43, 0.15	High water table; low relief	high water table			
gravelly silt loam	formed in alluvium from diabase and basalt;	_	Bearing Capacity: low				
0 - 3%	HYDRIC SOIL	D	Shrink-swell Potential: high in lower substratum				

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

	Jour Characteristics and Ose I oteniar	1 0	USE POTENTIAL AND PR	OBLEMS FOR	S	ELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
270B**	Deep, somewhat poorly drained, yellowish- brown loamy over clayey soils on gently	Moderate	POOR	NOT SUITED	PRIME PASTURE	MODERATE	
Mt. Lucas loam	sloping summits and footslopes; developed in colluvium over residuum from basalt and	0.37, 0.28	high water table; shrink-swell may occur in lower subsoil	high water table			
3 - 8%	diabase; may have inclusions of HYDRIC soils	С	Bearing Capacity: low Shrink-swell Potential: high				
274A**	Moderately deep, moderately well drained ,yellowish-brown silty soils with intermittent	Slight	FAIR	POOR	SECONDARY CROPLAND	MODERATE	
Ashburn gravelly silt loam	high water table water tables on nearly level landscapes; developed from thin fluvial cappings over Triassic siltstone	0.37, 0.24 C	intermittent high water table; low bearing capacity when wet due to high silt content and/or shrink-swell	shallow to rock high water table			
0 - 3%	cappings over Thassic sitistone	C	clay in lower horizon  Bearing Capacity: low  Shrink-swell Potential: moderate				
274B**	Moderately deep, moderately well drained ,yellowish-brown silty soils with intermittent	Moderate	FAIR	POOR	SECONDARY CROPLAND	MODERATE	
Ashburn gravelly silt loam	high water table water tables on level to gently sloping landscapes; developed from thin fluvial cappings over Triassic siltstone	0.37, 0.24 C	intermittent high water table; low bearing capacity when wet due to high silt content and/or shrink-swell	shallow to rock high water table			
3 - 8%	and natival cappings over massic should	C	clay in lower horizon  Bearing Capacity: low  Shrink-swell Potential: moderate				
275B**	Very deep, well drained, red to dark-red clayey soils on gently sloping ridgetops; developed in	Moderate	GOOD	MARGINAL	PRIME CROPLAND	MODERATE	
Casanova gravelly silt loam	residuum from Triassic siltstone and conglomerate	0.37, 0.28 B	Bearing Capacity: moderate Shrink-swell Potential: moderate	percs slowly			
3 - 8% 276B**	Very deep, well drained, strong brown to	Moderate	FAIR	GOOD	SECONDARY	MODERATE	
Sudley very gravelly	reddish-brown loamy soils on summits and gently sloping backslopes; developed in	0.37, 0.32		GOOD	CROPLAND	MODERATE	
silt loam	residuum from Triassic conglomerate	0.57, 0.32 B	Very gravelly surface  Bearing Capacity: moderate  Shrink-swell Potential: low				
3 - 8%							
276C**	Very deep, well drained, strong brown to reddish-brown loamy soils on strongly sloping	Moderate	FAIR	GOOD	SECONDARY CROPLAND	MODERATE	
Sudley very gravelly silt loam	backslopes; developed in residuum from Triassic conglomerate	0.37, 0.32 B	Very gravelly surface  Bearing Capacity: moderate  Shrink-swell Potential: low				
8 - 15%							

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		EDOCION HAZARS	USE POTENTIAL AND PR	OBLEMS FOR	SELECTED USES			
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS	
300**	This unit consists of areas where more than 80							
500	percent of the surface is covered by parking			D. T. D.				
Urban land	lots, buildings, and other structures.	Н	IGHLY VARIA	BLE				
313A**	Very deep, moderately well drained,	slight	FAIR	POOR	PRIME	MODERATELY		
	yellowish-brown loamy soils on footslopes,	C			CROPLAND	LOW		
Sumerduck Variant	heads of drainageways and benches;	0.43, 0.28	high water table	high water table				
silt loam	developed in local wash and residuum from sericite and biotite schist and gneiss	В	Bearing Capacity: moderate Shrink-swell Potential: low					
0 - 3%								
313B**	Very deep, moderately well drained, yellowish-brown loamy soils on footslopes,	Moderate	FAIR	POOR	PRIME CROPLAND	MODERATELY LOW		
Sumerduck Variant	heads of drainageways and benches;	0.43, 0.28	high water table	high water table				
silt loam	developed in local wash and residuum from		Bearing Capacity: moderate					
	sericite and biotite schist and gneiss	В	Shrink-swell Potential: low					
3 - 8%			W. 1 XII					
313C**	Very deep, moderately well drained, yellowish-brown loamy soils on footslopes,	Moderate	FAIR	POOR	SECONDARY CROPLAND	MODERATELY LOW		
Sumerduck Variant	heads of drainageways and benches;	0.43, 0.28	high water table	high water table				
silt loam	developed in local wash and residuum from	D	Bearing Capacity: moderate					
8 - 15%	sericite and biotite schist and gneiss	В	Shrink-swell Potential: low					
320B**	Moderately deep, well drained, strong brown	Moderate	FAIR	POOR	SECONDARY	LOW		
320B***	coarse-loamy soils on gently sloping summits	Moderate	raik	POOR	PASTURE	LOW		
Tankerville loam,	and backslopes; 0.1 – 3% surface stones;	0.28, 0.24	shallow to rock; stones	shallow to rock	TASTORE			
very stony	developed in residuum from granite, schist and	*.=*, *.= :	Bearing Capacity: moderate					
, ,	gneiss	C	Shrink-swell Potential: low					
2 - 17%								
320C**	Moderately deep, well drained, strong brown coarse-loamy soils on strongly sloping	High	FAIR	POOR	SECONDARY PASTURE	LOW		
Tankerville loam,	summits and backslopes; 0.1 – 3% surface	0.28, 0.24	shallow to rock; stones	shallow to rock				
very stony	stones; developed in residuum from granite,		Bearing Capacity: moderate					
	schist and gneiss	С	Shrink-swell Potential: low					
7 - 15%								
320D**	Moderately deep, well drained, strong brown coarse-loamy soils on moderately steep	High	POOR	POOR	SECONDARY PASTURE	LOW		
Tankerville loam,	backslopes; $0.1 - 3\%$ surface stones;	0.28, 0.24	shallow to rock; stones; steep slopes	shallow to rock				
very stony	developed in residuum from granite, schist and gneiss	С	Bearing Capacity: moderate Shrink-swell Potential: low	Steep slopes				
15 - 25%	5110100	C	Sin ink-swen i otentiai. 10W					

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

		EBOGROV W. GARB	USE POTENTIAL AND PRO	OBLEMS FOR	S	ELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
320E**	Moderately deep, well drained, strong brown coarse-loamy soils on steep backslopes; 0.1 –	Very high	VERY POOR	NOT SUITED	SECONDARY PASTURE	LOW	
Tankerville loam,	3% surface stones; developed in residuum	0.28, 0.24	shallow to rock; very steep slopes;	shallow to rock			
very stony	from granite, schist and gneiss	С	stones  Bearing Capacity: moderate	very steep slopes			
25 - 45%		C	Shrink-swell Potential: low				
320F**	Moderately deep, well drained, strong brown coarse-loamy soils on very steep backslopes;	Very high	VERY POOR	NOT SUITED	NOT SUITED	LOW	
Tankerville loam,	0.1 – 3% surface stones; developed in	0.28, 0.24	shallow to rock; very steep slopes;	shallow to rock			
very stony 45 - 65%	residuum from granite, schist and gneiss	C	stones  Bearing Capacity: moderate  Shrink-swell Potential: low	very steep slopes			
321C**	SEE MAP UNIT 130C		SM MA SWOM I GOOD TO WARE TO WARE				
325C**	Moderately deep, excessively drained, yellowish-brown coarse-loamy soils (Hazel)	Moderate	FAIR	MARGINAL	SECONDARY CROPLAND	LOW	
Hazel – Edgemont complex	and very deep, well drained, yellowish-brown loamy soils (Edgemont) on narrow summits and strongly sloping backslopes; developed in	0.24, 0.24 B	shallow to rock  Bearing Capacity: moderate  Shrink-swell Potential: low	shallow to rock			
7 - 15%	residuum from arkosic sandstone and meta- graywacke	D	Similar swen i occidenti iow				
325D**	Moderately deep, excessively drained, yellowish-brown coarse-loamy soils (Hazel)	High	FAIR	MARGINAL	PRIME PASTURE	LOW	
Hazel – Edgemont	and very deep, well drained, yellowish-brown	0.24, 0.24	shallow to rock; steep slopes	shallow to rock			
complex 15 - 25%	loamy soils (Edgemont) on moderately steep backslopes; developed in residuum from arkosic sandstone and meta-graywacke	В	Bearing Capacity: moderate Shrink-swell Potential: low	steep slopes			
325E**	Moderately deep, excessively drained, yellowish-brown coarse-loamy soils (Hazel)	Very High	POOR	NOT SUITED	SECONDARY PASTURE	LOW	
Hazel – Edgemont complex	and very deep, well drained, yellowish-brown loamy soils (Edgemont) on steep backslopes;	0.24, 0.24	very steep slopes; shallow to rock  Bearing Capacity: moderate	very steep slopes			
25 - 45%	developed in residuum from arkosic sandstone and meta-graywacke	В	Shrink-swell Potential: low				
330C**	Moderately deep, excessively well drained, dark brown, loamy skeletal soil on summits	Moderate	FAIR	POOR	SECONDARY PASTURE	MODERATELY LOW	
Chestnut Variant	and strongly sloping backslopes; contains	0.24, 0.24	shallow to rock; stoniness	shallow to rock			
sandy loam; very stony	greater than 35% coarse fragments in the subsoil; developed in residuum from coarse-grained granite; predominantly found on the Cobbler mountain formations	В	Bearing Capacity: high Shrink-swell Potential: low				

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MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
330D**	Moderately deep, excessively well drained,	High	FAIR	POOR	SECONDARY	MODERATELY	
330D	dark brown, loamy skeletal soil on moderately	High	TAIK	TOOK	PASTURE	LOW	
Chestnut Variant	steep backslopes; contains greater than 35%	0.24, 0.24	steep slopes; shallow to rock;	shallow to rock			
sandy loam; very	coarse fragments in the subsoil; developed in	_	stoniness	steep slopes			
stony	residuum from coarse-grained granite; predominantly found on the Cobbler Mountain	В	Bearing Capacity: high Shrink-swell Potential: low				
15 - 25%	formations						
330E**	Moderately deep, excessively well drained, dark brown, loamy skeletal soil on steep	Very high	POOR	NOT SUITED	NOT SUITED	LOW	
Chestnut Variant	backslopes; contains greater than 35% coarse	0.24, 0.24	very steep slopes; shallow to rock;	shallow to rock			
sandy loam; very	fragments in the subsoil; developed in		stoniness	very steep slopes			
stony	residuum from coarse-grained granite; predominantly found on the Cobbler Mountain	В	Bearing Capacity: high Shrink-swell Potential: low				
25 - 50%	formations		Shrink-swell Potential: 10W				
340B**	Moderately deep, well drained, strong brown	Moderate	FAIR	POOR	SECONDARY	MODERATE	
3.02	loamy-skeletal soils containing more than 35%	1110401410		10011	CROPLAND	MODERATIE	
Catoctin silt loam	rock fragments in the subsoil on gently sloping	0.32, 0.17	shallow to rock	shallow to rock			
	summits and backslopes in highly dissected		Bearing Capacity: moderate				
2 - 7%	landscapes; developed in residuum from	В	Shrink-swell Potential: low				
340C**	greenstone	N 1 4	FAID	DOOD	CECONDARY	MODERATE	
340C^^	Moderately deep, well drained, strong brown loamy-skeletal soils containing more than 35%	Moderate	FAIR	POOR	SECONDARY CROPLAND	MODERATE	
Catoctin silt loam	rock fragments in the subsoil on strongly	0.32, 0.17	shallow to rock	shallow to rock	CKOI LAND		
Cutocini siit iouin	sloping backslopes and undulating summits in	0.52, 0.17	Bearing Capacity: moderate				
7 - 15%	highly dissected landscapes; developed in	В	Shrink-swell Potential: low				
	residuum from greenstone						
340D**	Moderately deep, well drained, strong brown loamy-skeletal soils containing more than 35%	High	FAIR	POOR	PRIME PASTURE	LOW	
Catoctin silt loam	rock fragments in the subsoil on moderately	0.32, 0.17	shallow to rock; steep slopes	shallow to rock			
	steep backslopes in highly dissected	_	Bearing Capacity: moderate	Steep slopes			
15 - 25%	landscapes; developed in residuum from greenstone	В	Shrink-swell Potential: low				
340E**	Moderately deep, well drained, strong brown loamy-skeletal soils containing more than 35%	Very high	POOR	NOT SUITED	SECONDARY PASTURE	LOW	
Catoctin silt loam	rock fragments in the subsoil on steep	0.32, 0.17	shallow to rock; very steep slopes	shallow to rock			
25 - 50%	backslopes in highly dissected landscapes; developed in residuum from greenstone	В	Bearing Capacity: moderate Shrink-swell Potential: low	very steep slopes			

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			USE POTENTIAL AND PRO	OBLEMS FOR	S	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
2(5D44	XX 1 10.1 1 1 1 2 20	) ( 1 · ·	ETID	MARCHAN	GEGOVE LEV	MODERATE	
365B**	Very deep, well drained, red clayey soils with many stones and few boulders on ridgetops;	Moderate	FAIR	MARGINAL	SECONDARY PASTURE	MODERATE	
Montalto silty clay	developed in residuum from Triassic diabase.	0.28, 0.28	stoniness	percs slowly			
loam, extremely stony		C	Bearing Capacity: moderate Shrink-swell Potential: moderate				
3 - 8%							
365C**	Very deep, well drained, red clayey soils with many stones and few boulders on strongly	Moderate	FAIR	MARGINAL	SECONDARY PASTURE	MODERATE	
Montalto silty clay	sloping sideslopes; developed in residuum	0.28, 0.28	stoniness	percs slowly			
loam, extremely stony	from Triassic diabase.	C	Bearing Capacity: moderate Shrink-swell Potential: moderate				
8 - 15%							
370B**	Very deep, somewhat poorly drained, yellowish-brown loamy over clayey soils on	Moderate	POOR	NOT SUITED	SECONDARY PASTURE	MODERATELY LOW	
Mt. Lucas loam,	gently sloping summits and footslopes; soil	0.37, 0.28	intermittent high water table;	high water table			
extremely stony	surface is covered by 4 – 15% stones; developed in colluvium over residuum from	С	stoniness  Bearing Capacity: low				
3 - 8%	basalt and diabase; may have inclusions of HYDRIC soils	C	Shrink-swell Potential: moderate				
413B**	Very deep, moderately well to somewhat poorly drained, mottled yellowish-brown and	Moderate	POOR	NOT SUITED	PRIME PASTURE	MODERATELY LOW	
Lignum Variant silt	gray clayey soils on footslopes, heads of	0.43, 0.28	intermittent high water table; low	high water table			
loam	drainageways and benches; developed in local wash and residuum from sericite and biotite	С	bearing capacity; may have shrink- swell clay in subsoil				
3 - 8%	schist and gneiss	C	Bearing Capacity: low Shrink-swell Potential: high				
413C**	Very deep, moderately well to somewhat poorly drained, mottled yellowish-brown and	Moderate	POOR	NOT SUITED	PRIME PASTURE	MODERATELY LOW	
Lignum Variant silt	gray clayey soils on footslopes, heads of	0.43, 0.28	Intermittent high water table; low	high water table			
loam	drainageways and strongly sloping backslopes; developed in local wash and residuum from	С	bearing capacity; may have shrink- swell clay in subsoil				
8 - 15%	sericite and biotite schist and gneiss		Bearing Capacity: low Shrink-swell Potential: high				

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, ,	,		USE POTENTIAL AND PRO	OBLEMS FOR	S	SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
415A**	Very deep, moderately well drained, yellowish-brown loamy soils with intermittent	Slight	FAIR	POOR	PRIME CROPLAND	MODERATE	
Seneca Variant loam	high water tables on colluvial benches and toeslopes; developed in recent colluvium from	0.37, 0.28	intermittent high water table; low bearing capacity when wet	high water table			
0-2%	crystalline uplands	В	Bearing Capacity: moderate Shrink-swell Potential: low				
415B**	Very deep, moderately well drained, yellowish-brown loamy soils with intermittent	Moderate	FAIR	POOR	PRIME CROPLAND	MODERATE	
Seneca Variant loam	high water tables on colluvial benches and toeslopes; developed in recent colluvium from	0.37, 0.28	intermittent high water table; low bearing capacity when wet	high water table			
2 - 7%	crystalline uplands	В	Bearing Capacity: moderate Shrink-swell Potential: low				
415C**	Very deep, moderately well drained, yellowish-brown loamy soils with intermittent	Moderate	FAIR	POOR	SECONDARY CROPLAND	MODERATE	
Seneca Variant loam	high water tables on colluvial benches and toeslopes; developed in recent colluvium from	0.37, 0.28	intermittent high water table; low bearing capacity when wet	high water table			
7 - 15%	crystalline uplands	В	Bearing Capacity: moderate Shrink-swell Potential: low				
4l6B**	Very deep, well drained, yellowish-brown to reddish-brown silty soils on colluvial benches	Moderate	GOOD	MARGINAL	PRIME CROPLAND	MODERATELY HIGH	
Meadowville	and toeslopes; developed in recent colluvium	0.37, 0.32		landscape position	CKOLLAND	mon	
Variant silt loam 2 - 7%	and local wash from acid rock materials	В	Bearing Capacity: moderate Shrink-swell Potential: low				
416C**	Very deep, well drained, yellowish-brown to reddish-brown silty soils on colluvial benches	Moderate	GOOD	MARGINAL	SECONDARY CROPLAND	MODERATELY HIGH	
Meadowville	and toeslopes; developed in recent colluvium	0.37, 0.32	B	landscape position		-	
Variant silt loam 7 - 15%	and local wash from acid rock materials	В	Bearing Capacity: moderate Shrink-swell Potential: low				
417B**	Very deep, well drained, brown loamy soils on colluvial benches and toeslopes; developed in	Moderate	GOOD	MARGINAL	PRIME CROPLAND	HIGH	
Middleburg Variant	recent colluvium from basic crystalline rock	0.37, 0.28		landscape position	51101 2111.13		
loam	materials	В	Bearing Capacity: moderate Shrink-swell Potential: low				
2 - 7%							

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

	Son Characteristics and Ose I otenhar	EROSION HAZARD	USE POTENTIAL AND PRO	OBLEMS FOR	Si	ELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
417C**	Very deep, well drained, brown loamy soils on	Moderate	GOOD	MARGINAL	SECONDARY	HIGH	
1170	colluvial benches and toeslopes; developed in	Wiodelate	GOOD	WI HOW WILL	CROPLAND	111011	
Middleburg Variant	recent colluvium from basic crystalline rock	0.37, 0.28		landscape position			
loam	materials	В	Bearing Capacity: moderate Shrink-swell Potential: low				
7- 15%			2				
420E**	Moderately deep, well drained, strong brown coarse-loamy soils on very steep backslopes; 3	Very high	VERY POOR	NOT SUITED	NOT SUITED	LOW	
Tankerville loam,	- 15% surface stones; developed in residuum	0.28, 0.24	shallow to rock; very steep slopes;	shallow to rock			
extremely stony	from granite, schist and gneiss	~	stones	very steep slopes			
25 450/		С	Bearing Capacity: moderate				
25 - 45% 420F**	Moderately deep, well drained, strong brown	Very high	Shrink-swell Potential: low VERY POOR	NOT SUITED	NOT SUITED	LOW	
4201	coarse-loamy soils on very steep backslopes;	very mgn	VERTIOOR	NOT SOTTED	NOT SOTTED	LOW	
Tankerville loam,	3–15% surface stones; developed in residuum	0.28, 0.24	shallow to rock; very steep slopes;	shallow to rock			
extremely stony	from granite, schist and gneiss		stones	very steep slopes			
45 - 65%		С	Bearing Capacity: moderate Shrink-swell Potential: low				
425C**	Moderately deep, excessively drained, yellowish-brown coarse-loamy soils on	Moderate	FAIR	POOR	SECONDARY CROPLAND	LOW	
Hazel fine sandy	sloping summits and backslopes; developed in	0.24, 0.24	shallow to rock	shallow to rock			
loam	residuum from arkosic sandstone and meta-	_	Bearing Capacity: moderate				
7- 15%	graywacke	В	Shrink-swell Potential: low				
425D**	Moderately deep, excessively drained,	High	FAIR	POOR	PRIME	LOW	
4230	yellowish-brown coarse-loamy soils on	High	TAIK	TOOK	PASTURE	LOW	
Hazel fine sandy	moderately steep backslopes; developed in	0.24, 0.24	shallow to rock; steep slopes	shallow to rock			
loam	residuum from arkosic sandstone and meta-		Bearing Capacity: moderate	steep slopes			
15 250/	graywacke	В	Shrink-swell Potential: low				
15- 25% 425E**	Moderately deep, excessively drained,	Very High	POOR	NOT SUITED	SECONDARY	LOW	
T49E	yellowish-brown coarse-loamy soils on steep	very ringil	TOOK	NOI SUITED	PASTURE	LOW	
Hazel fine sandy	backslopes; developed in residuum from	0.24, 0.24	shallow to rock; very steep slopes	shallow to rock			
loam	arkosic sandstone and meta-graywacke		Bearing Capacity: moderate	very steep slopes			
25 450/		В	Shrink-swell Potential: low				
25- 45% 430B**	Moderately deep, well drained, dark brown	Moderate	FAIR	POOR	PRIME	LOW	
430D	coarse-loamy soil on summits and gently	Moderate	PAIK	TOOK	CROPLAND	LOW	
Chestnut sandy	sloping backslopes; developed in residuum	0.24, 0.24	shallow to rock	shallow to rock	SKOLLIND		
loam	from coarse-grained granite		Bearing Capacity: moderate				
2 50/		В	Shrink-swell Potential: low				
2 - 7%							

Table. Summary of Soil Characteristics and Use Potential (\*\*-- not part of official soil survey)

•			USE POTENTIAL AND PR	OBLEMS FOR	S	ELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
430C**	Moderately deep, well drained, dark brown	Moderate	FAIR	POOR	SECONDARY	LOW	
4300	coarse-loamy soil on summits and strongly	Wiodelate	TAIR	TOOK	CROPLAND	LOW	
Chestnut sandy	sloping backslopes; developed in residuum	0.24, 0.24	shallow to rock; steep slopes	shallow to rock; steep			
loam	from coarse-grained granite	В	<b>Bearing Capacity:</b> moderate <b>Shrink-swell Potential:</b> low	slopes			
7 - 15% 430D**	Moderately deep, well drained, dark brown	High	POOR	POOR	PRIME	LOW	
4300	coarse-loamy soil on moderately steep	High	FOOR	FOOR	PASTURE	LOW	
Chestnut sandy	backslopes; developed in residuum from	0.24, 0.24	shallow to rock; steep slopes	shallow to rock			
loam	coarse-grained granite;		Bearing Capacity: moderate	steep slopes			
15 250/		В	Shrink-swell Potential: low				
15 - 25% 430E**	Moderately deep, well drained, dark brown	Very high	VERY POOR	NOT SUITED	SECONDARY	LOW	
430E***	coarse-loamy soil on steep backslopes;	very mgn	VERT POOR	NOT SUITED	PASTURE	LOW	
Chestnut sandy	developed in residuum from coarse-grained	0.24, 0.24	very steep slopes; shallow to rock	shallow to rock	THOTORE		
loam	granite		Bearing Capacity: moderate	very steep slopes			
25 500/		В	Shrink-swell Potential: low				
25 - 50% 430E3**	Moderately deep, well drained, dark brown,	Very High	VERY POOR	NOT SUITED	NOT SUITED	LOW	
430E3	coarse-loamy soil on steep backslopes; most of	very ringii	VERTIOOR	NOT SOTTED	NOT SOTTED	LOW	
Chestnut sandy	the topsoil and subsoil has been eroded off,	0.24, 0.24	very steep slopes; shallow to rock;	very steep slopes			
loam; severely	developed in residuum from coarse-grained		severely eroded	Shallow to rock			
eroded	granite	С	Bearing Capacity: moderate				
25 - 50%			Shrink-swell Potential: moderate				
434B**	Very deep, moderately well drained,	Moderate	FAIR	POOR	PRIME	LOW	
.5 .5	yellowish-red clayey soils on summits and	1110401410		10011	CROPLAND	20	
Yellowbottom	gently sloping backslopes; developed in	0.43, 0.28	intermittent high water table	high water table			
Variant loam	residuum from sericite, biotite schists and		Bearing Capacity: moderate				
3 - 8%	meta-monzanite granite	В	Shrink-swell Potential: moderate				
434C**	Very deep, moderately well drained,	Moderate	FAIR	POOR	SECONDARY	LOW	
- · <del>-</del>	yellowish-red clayey soils on strongly sloping		<del></del>		CROPLAND	_2	
Yellowbottom	backslopes; developed in residuum from	0.43, 0.28	intermittent high water table	high water table			
Variant loam	sericite, biotite schists and meta-monzanite	D	Bearing Capacity: moderate				
8 - 15%	granite	В	Shrink-swell Potential: moderate				
0 - 1370							

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			USE POTENTIAL AND PR	OBLEMS FOR		SELECTED USES	
MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
438B**	Very deep, somewhat poorly drained,	Moderate	VERY POOR	NOT SUITED	PRIME	MODERATELY	
430 <b>D</b>	brownish- yellow loamy soils with high water	Wioderate	VERTIOOR	NOT SOTTED	PASTURE	LOW	
Swampoodle	tables on broad summits and slight	0.28, 0.28	high water table; possible shink-	high water table			
Variant loam	depressions; may have shrink-swell clay in	0	swell clays				
2 - 7%	subsoil; developed in local colluvium and residuum from granitic rocks; may have HYDRIC soil inclusions	С	Bearing Capacity: low Shrink-swell Potential: high				
475A**	Very deep, moderately well to somewhat poorly drained, yellowish-red, dense clayey	Slight	FAIR	POOR	SECONDARY CROPLAND	MODERATE	
Tinpot loam	soils on nearly level summits; developed in	0.37, 0.28	high water table	high water table			
0.20/	residuum from Triassic conglomerate, shale	0	Bearing Capacity: low	percs very slowly			
0-3% 475B**	and fine-grained sandstone  Very deep, moderately well to somewhat	C Moderate	Shrink-swell Potential: high FAIR	POOR	SECONDARY	MODERATE	
4/3D***	poorly drained yellowish-red dense clayey	Moderate	FAIR	POOR	CROPLAND	MODERATE	
Tinpot loam	soils on gently sloping summits; developed in residuum from Triassic conglomerate, shale	0.37, 0.28	high water table  Bearing Capacity: low	high water table; percs very slowly	CROT ETHAD		
3 - 8%	and fine-grained sandstone	C	Shrink-swell Potential: high				
475C**	Very deep, moderately well to somewhat poorly drained, yellowish-red, dense clayey	Moderate	FAIR	POOR	SECONDARY CROPLAND	MODERATE	
Tinpot loam	soils on strongly sloping backslopes;	0.37, 0.28	high water table	high watertable; percs			
8 - 15%	developed in residuum from Triassic conglomerate, shale and fine-grained sandstone	C	Bearing Capacity: low Shrink-swell Potential: high	very slowly			
481B**	Very deep, moderately well drained, light yellowish-brown to strong brown clayey soils	Moderate	FAIR	POOR	SECONDARY CROPLAND	MODERATE	
Brumbaugh Variant	on footslopes and toeslopes of mountains and	0.28, 0.20	intermittent high water table; low	high water table			
loam	in broad gently sloping interfluves; semi- rounded stones make up 5-50% of the soil;	В	bearing capacity when wet due to shrink-swell clays				
2 - 7%	developed in old mountain colluvium from	Б	siiiiik-sweii ciays				
2 //0	mixed acidic and basic rocks		Bearing Capacity: low Shrink-swell Potential: high				
482B**	Very deep, somewhat poorly drained, brownish yellow and gray clayey soils on	Moderate	VERY POOR	NOT SUITED	SECONDARY PASTURE	MODERATELY LOW	
Scattersville Variant	gently sloping footslopes; developed in	0.37, 0.28	high water table; low bearing	high water table			
loam	colluvium from felsic to mafic rock	C	capacity when wet				
2 - 7%		С	Bearing Capacity: low Shrink-swell Potential: high				

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MAP. UNIT SYMBOL SOIL NAME SLOPE	SOIL CHARACTERISTICS	EROSION HAZARD K Factor (surface/subsoil) HYDROLOGIC GROUP	GENERAL DEVELOPMENT USING CENTRAL WATER AND CENTRAL SEWER	DEVELOPMENT USING CONVENTIONAL SEPTIC TANK AND DRAINFIELD	AGRICULTURE	FORESTRY (HARDWOOD)	LAND USE CAPABILITY CLASS
493A**	Very deep, somewhat poorly drained, yellowish-brown clayey soils with high water	Slight	VERY POOR	NOT SUITED	SECONDARY PASTURE	MODERATELY LOW	
Delanco Variant loam	tables on nearly level, low terraces along major streams; developed in old alluvium washed from uplands underlain by a wide variety of	0.28, 0.28 C	high water table; low bearing capacity whe wet; shrink-swell clay Bearing Capacity: low	high water table	TASTORE	LOW	
0 - 2%	rocks common to the county	· ·	Shrink-swell Potential: high				
520F**	Moderately deep, well drained, strong brown coarse-loamy soils on very steep backslopes;	Very high	VERY POOR	NOT SUITED	NOT SUITED	LOW	
Tankerville loam,	15% or more surface stones; developed in	0.28, 0.24	shallow to rock; very steep slopes;	shallow to rock			
rubbly	residuum from granite, schist and gneiss		stones	very steep slopes			
45 - 65%		С	Bearing Capacity: moderate Shrink-swell Potential: low				